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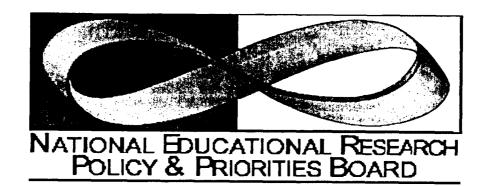
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ABSTRACT

This packet contains materials related to the reauthorization of the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education. It contains comments and testimony from individuals and groups, including the National Educational Research Policy and Priorities (NERRP) Board, all of whom have an interest in how research in education should be conducted and supported at the federal level. The packet contains these materials: (1) "Joint Hearing on Research and Evaluation" (Senate Committee on Health, Education, Labor, and Pensions and House Committee on Education and the Workforce); (2) "Hearings Held by the Senate Committee on Health, Education, Labor, and Pensions"; (3) "Brookings Conference Paper—Schools, Government, and the Federal Role in Education" (Paul T. Hill); (4) "Presentation at the NERRP Board Meeting—"Building a Knowledge Base for Effective Teaching and Learning" (Douglas Carmine and Hans Meeder); and (5) "Summary Chart of Recommendations for OERI Reauthorization." (SLD)



A COLLECTION OF BACKGROUND MATERIALS FOR THE OERI REAUTHORIZATION

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UNITED STATES DEPARTMENT OF EDUCATION

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August 12, 1999

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E. Lea Schelke Trenton, Michigan Knowing of your interest in the impending Congressional reauthorization of the Office of Educational Research and Improvement, we have assembled the enclosed packet of materials for your perusal. It contains comments and testimony from individuals and groups, including the Board, all of whom have an informed perspective on how research in education should be conducted and supported at the federal level.

This collection does not exhaust the topic, but I think it represents a spectrum of opinion, and we are pleased to include with it a chart which summarizes the positions taken by the major commentators to date. I hope you will find this collection useful as well as convenient, and I welcome your comments and additions. You may send your comments to me in care of

The National Educational Research Policy and Priorities Board 80 F St. NW, Suite 100

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Tel: (202) 208-0692 Fax: (202) 219-1528.

I may also be reached by e-mail: *Eve_Bither@ed.gov*. Thank you for your interest, and I look forward to hearing from you.

Sincerely,

Eve M. Bither

EVE M. Bitter

JOINT HEARING ON RESEARCH AND EVALUATION

SENATE COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS &
HOUSE COMMITTEE ON EDUCATION AND THE WORKFORCE

JOINT HEARING RESEARCH AND EVALUATION SENATE COMMITTEE ON HEALTH, EDUCATION, LABOR,& PENSIONS &

HOUSE COMMITTEE ON EDUCATION AND THE WORKFORCE JUNE 17, 1999

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STATEMENT

BY

CHRISTOPHER T. CROSS

PRESIDENT,
COUNCIL FOR BASIC EDUCATION

JUNE 17, 1999

Joint Hearing

Senate Committee on Health, Education, Labor, and Pensions

House Committee on Education and the Workforce

Chairman Jeffords, Chairman Goodling, Members of the Senate and House Committees:

Good Morning and thank you for inviting me to provide my thoughts and perspectives on the very important topic of educational research.

If I may, permit me to provide a bit of personal background relative to this topic. When the legislation creating the National Institute of Education was passed in 1972, I was the deputy assistant secretary for education legislation in the Department of Health, Education and Welfare. In that capacity, I worked very closely with Secretary Elliott Richardson and the committee leadership on both sides of the aisle, in both the House the Senate, to secure the enactment of the NIE legislation. That legislation separated the research and statistics function from the old Office of Education and made it an independent agency within HEW.

Following my service in HEW, I joined the staff of the House Committee on Education and Labor where my responsibilities included the NIE legislation. That enabled me to stay current with this new agency. Upon leaving the Hill, I joined the private sector where I then spent more than a decade with firms that served as contractors to Federal agencies including, on rare occasions, NIE and, later, OERI. In 1986, I was asked to chair a panel examining the regional labs for OERI. In 1989, I was appointed assistant secretary for educational research and improvement. More recently, I have served as a member of the committee that developed recommendations for the OERI priorities board on peer

review and, in a related area, I chair the Independent Review Panel on Evaluation, providing guidance to the Planning and Evaluation Service in the office of the Deputy Secretary.

I have given that background only to show that I have closely followed, and often been involved in, the progress and travails of the Federal research function for nearly 30 years.

What is clear from the history of educational research at the Federal level is that the field is troubled, that it has never really found its place, and that it lacks a specific vision and mission.

As the Congress considers the reauthorization of this extremely important function, I offer a number of points for your consideration.

Mission and Vision

After all of these years, the mission and vision of the Federal role in educational research remains unclear. What is an adequate level of funding? How should the agency be governed, led, and managed? Is it to engage in basic research, applied research, or both? Is the primary audience researchers or practitioners? How should research information reach practitioners and policy makers? Is the agency to serve the field directly or through intermediaries? How does the role of the regional labs fit in the structure? How can the best people in the field be enticed to become involved? Is OERI to manage research or to

conduct it with its own staff? What is the relationship between the statistics and research areas? Should research be separated from program evaluation?

In reauthorization, Congress needs to address and resolve these issues so that there is clear guidance to the agency.

Funding

Clearly, our investment in research is deficient in the extreme. While most fields spend from one percent to as much as ten percent of their budgets on research, education spends a fraction of one percent. Yet, who among us would not agree that education should be society's highest priority? Who would not agree that progress cannot be made without an adequate investment in research and development? While it would clearly not be prudent to make a huge investment immediately, there should be in place a specific Congressional plan to increase funding over a period of several years to a level that would assure that at least two percent of all federal education dollars are being directed to research. At that level, we would be talking about an investment of at least \$700 million within a few years, compared with a current appropriation for research that is less than \$100 million.

Governance

Recent events have raised questions about the independence and governance of OERI and NCES. There are many issues here that merit consideration. The 1994 amendments to

OERI created a structure of five separate institutes and a policy board. In my view, neither the structure nor the board has worked as intended. If OERI were funded at the level I suggest, an institute structure might work better but would still be flawed. Right now, there are too many demands for too little money resulting in an overhead structure that is too expensive and a fragmentation of research that is both unproductive and uncoordinated.

I recommend eliminating the institutes and replacing the policy board with a new board that has real power, much like the National Science Board at NSF. Specifically, the new board should be required to establish specific research priorities and align funding and staffing with those priorities. The board should be composed primarily of practitioners, policy makers and researchers. I will address the research priorities issues in more depth at a later point.

I would also suggest that strong consideration be given to creating the research function as an independent agency, what I call "The Agency for Learning." An independent agency, like NSF, would ensure the integrity of this function, remove it as much as possible from politics and allow it to have a fresh start. That fresh start should include the opportunity to select staff from a variety of sources, both Federal and non-Federal.

Leadership

The head of OERI should have a fixed term, one that is not concurrent with the election of a new administration. If the agency remains in the Department of Education, the head also should not be an assistant secretary, a position that carries certain political baggage, but, as in the case of NSF or other agencies, be called a director or commissioner. Again, if this function remains within the U.S. Department, I would also suggest barring the person who serves as head of the agency from holding a concurrent title outside of the agency, such as counselor to the secretary. In addition, I would amend the NCES legislation to permit the person in office to serve until replaced. However, the term of office should remain as stated so that these key personnel selections are not made by a brand new Administration.

Personnel Authority

When it was created, NIE had the authority to hire a percentage of its staff outside the normal civil service rules. This was designed to allow the non-permanent appointment of "senior scholars," an authority that is similar to NSF's ability to bring in staff not in the civil service. This would allow some major research to be conducted within the agency, thereby creating some balance between internal and external work. While the preponderance of work would be external, it is also important that there be some internal work as a way to attract top-flight talent to the agency. Therefore, the exempt authority

needs to be restored, limited to not more than 10 percent of the staff, and with the ability to hire up through the equivalent of the SES salary levels. I would also suggest that no person be permitted to serve more than two years and that terms not be renewable. However, as a check and balance, an annual report to Congress on the use of this authority should be required.

Basic vs. Non-basic Research

At this point, OERI really does not fund basic research. Work of that nature has taken place in NICHD, in DOD and, to an extent, in NSF. OERI needs to have a clear and explicit basic research program.

Two recent reports from the National Research Council, How People Learn, and Improving Student Learning: A Strategic Plan for Educational Research and Its Utilization, present an excellent starting point for the consideration of that agenda. A more recent report, How People Learn: Bridging Research and Practice also merits the attention of both committees. All of these materials significantly advance the discussion of what the research agenda should be and how it should be determined. The most important issue here is that a specific set of priorities is established.

Equally important is that an allocation be made between funds invested in basic and non-basic research. I would recommend initially that a minimum of 20 percent of funding go to basic research, rising to 50 percent when total appropriations reach the level of \$600

million. I would not start at the 50 percent level because designing top quality basic research programs takes considerable time and effort. I would also recommend that Congress consider the applicability of the NIH consensus development process as a model to be considered for use in determining that agenda and in endorsing the efficacy of "treatments" in education.

Educating Consumers

A major problem in the field of education is that few are trained to become educated consumers, asking such questions as "What is the research base?" "Where is the data?" "Has there been peer review of the evidence?" etc. I cannot recall having ever heard of a prospective teacher trained to ask these questions, knowing where to go for good information, or knowing what to do with this information if indeed they obtain it.

A guide to comprehensive school reform was published earlier this year by several major associations. This guide asked explicit questions of model developers and then published that information. While naturally controversial, the guide is a wonderful example of what can be done. I would recommend that the Congress consider funding programs to educate educators in the field of research and require the development of explicit criteria that would then be applied to evaluate research information. In addition, education schools should be required to instruct teacher candidates in the use of research in the same way that doctors and lawyers graduate fully aware of the importance and power of resources

like MEDLINE and LEXIS/NEXIS. We can hardly expect to see research used and valued if those who we want to use it are not relatively sophisticated in its use.

Dissemination

The distribution of information to the field has been an issue for decades. The ERIC system was created to help with that function. However, with the rapid growth in technology, ERIC is no longer the state of the art. Today, a teacher at home or in a classroom, has the ability to access almost anything that they want in the whole world. Sending them to an "old" system simply does not work. We must harness the power of technology in the 21st century to radically transform the dissemination of information.

At the same time we have a system of ten regional labs across the country. They are supposed to be providing information to local and state school districts, often information that is or could be directly accessible to the user via the Internet.

We have also done a poor job in requiring the various university-based research centers to devote enough effort to dissemination. While there are centers that do an excellent job, others are far less diligent. Every grant and contract award should require both a plan for dissemination and the earmarking of specific funds for that purpose.

My colleagues know that for a decade I have talked about the need in education for a learned journal that would be analogous to the New England Journal of Medicine. What I

envision is a journal with such prestige that practitioners could rely upon what they read there as the best information available, peer-reviewed and vetted for quality. Sadly, we lack anything that is even close to that model.

Regional Labs and Technical Assistance

Ever since the creation of NIE, we have been wrestling with the question of the role and function of regional labs. Congress has also mandated the creation of several other technical assistance and dissemination mechanisms, including Title I centers, comprehensive centers, bilingual centers and more. I am constantly told by people in the field that they do not know whom to turn to for what. Attached to my statement is a listing of those technical assistance providers, excluding the regional labs. This list is taken from the U.S. Department of Education's recent report, Federal Education Legislation Enacted in 1994.

One potential solution here is to give states and local districts an allowance for the purchase of technical assistance services and then allow them to purchase these services from whomever they wish as long as that provider meets certain criteria related to quality, comprehensiveness, and the use of research. This would be a voucher-based approach. Each of the existing centers could be given one final grant to allow them to prepare to meet this new competitive situation and then be allowed to sink, merge, or swim. In any case, there should be clear expectations about what services and information might be provided through these centers and labs. Consideration might also

be given to removing the labs from the research agency. Frankly, over the years the politics of the labs have meant that they have prospered while the research function has withered.

Collaboration With Other Agencies

There are a number of other Federal agencies both within Education and outside of it, that conduct research relevant to education, NSF, NIH, DOD, to name but a few. Over the years there has been little or no coordination of research agendas and work across these various agencies. While I do not advocate that OERI or any successor agency exercise control over these other agencies, I do believe that coordination is vital. Therefore, I would suggest that before any research study could be advertised or awarded, that every other pertinent agency be notified and given the opportunity to comment and to provide notification about any related work that had already been funded or is planned. This can easily be done via the development of an Intranet. I would also require that a database be maintained of all funded studies and that there be an annual report to Congress on the use of this mechanism.

NCES Data

The National Center on Education Statistics has developed an enormous set of data, much of it of a longitudinal nature. For the most part, that data have not been analyzed in a thorough manner relative to policy and practice. NCES has, quite rightly, taken the

position that its role is to create and report the data, not to interpret it. Any new legislation might require that a new data analysis unit be established in OERI (not NCES) to mine this vast mountain of data for the gems that are surely there. Recent work by Clifford Adelman on high school course taking and the link to later success is an excellent example of the work that can and should be done using that data.

Research and Evaluation

The line between research and evaluation is often unclear. Program evaluation is carried out by the Planning and Evaluation Service in the Office of the Deputy Secretary. While more collaboration has taken place in recent years, more needs to occur. I do not recommend that program evaluation be co-located with the research function. However, evaluation results need to inform research and research needs to inform the evaluation of programs. In the interest of producing the best possible information for educators and policymakers, a Congressional mandate for that coordination needs to be very explicit in any new legislation

I do hope that my comments will be useful to both Committees as they begin their consideration of reauthorizing Federal research and data programs. I would be pleased to respond to any questions that you may have.

IMPROVING FEDERAL EDUCATIONAL RESEARCH,

DEVELOPMENT, AND EVALUATION*

Maris A. Vinovskis

Department of History,
Institute for Social Research,
and School of Public Policy
University of Michigan

Testimony presented at a Joint Hearing on the "Overview of Federal Education Research and Evaluation Efforts"

U.S. House of Representatives Committee on Education and the Workforce and the U.S. Senate Committee on Health, Education, Labor, and Pensions

June 17, 1999

* This statement is based in part on my two recent essays: (1) "Missing in Practice? Systematic Development and Rigorous Program Evaluation at the U.S. Department of Education," paper delivered at Conference on Evaluation of Educational Policies, American Academy of Arts and Sciences, Cambridge, MA, May 13-14, 1999; and (2) "Restructuring the Office of Educational Research and Improvement (OERI) and Enhancing the Federal Role in Educational Research and Development," paper delivered at the Brookings Institution's Conference on the Reauthorization of the Elementary and Secondary Education Act, Washington, DC, May 17-18, 1999. A revised version of the second paper will be forthcoming in Brookings Papers on Education Policy, 2000, ed. Diane Ravitch.

My name is Maris Vinovskis and I am the Bentley Professor of History and a Senior Research Scientist at the Institute for Social Research as well as a Professor in the School of Public Policy at the University of Michigan. I was also the Research Advisor to the Office of Educational Research and Improvement (OERI) in 1992 and 1993 and thus have had the privilege to work with both the Bush and Clinton Administrations. I will submit for the record a copy of the two essays upon which much of this testimony is based and will briefly summarize my main points for the Committees now.

The federal government has been collecting, analyzing and disseminating educational statistics for more than 130 years. Over time the focus has shifted from data gathering to emphasis on research and development in order to find more effective ways of educating children at the state and local levels. Work on educational research and development, however, usually has not been held in high esteem by most academics and policy makers in the twentieth century.

The need for federal involvement in educational research, development, and statistics has increased today. Analysts and policy makers are slowly and reluctantly acknowledging that many of the basic federal compensatory education programs established in the 1960's are not as effective as we had hoped. Large-scale, popular federal educational initiatives such as Title I and Head Start probably do offer some assistance for many disadvantaged But these programs have not provided the same educational opportunities for at-risk children as for their more fortunate counterparts. Many of these federal initiatives are really only general funding mechanisms rather than specific programs proven to be particularly effective for helping children who live in more impoverished homes and neighborhoods. have enough sufficiently detailed and reliable statistical information about our schools to help educators formulate better policy alternatives. As a result, there is a growing need for better educational research, development, and statistics to improve education and schooling for everyone.

A major problem with educational research and evaluation is that some of it has not been high quality scholarship; academics in the other behavioral and social science disciplines frequently regard educational research and evaluation as second-rate methodologically and conceptually. The low opinion of the quality of much of educational research and development is also shared by many policy makers who consider the work sponsored by NSF or NIH generally to be more rigorous and scientifically sound than that produced by first by the lational Institute of Education (NIE) and then by its successor, the Office of Educational Research and Improvement (OERI). Similarly, the quantity and quality of program evaluations by the Office of Planning and Evaluation Service (PES) have not always been regarded as satisfactory during the past 15 years.

One of the serious limitations of educational research and evaluations has been the lack of adequate funding and I certainly favor allocating additional monies—as long as those dollars will be spent wisely and effectively. Yet the lack of money by itself cannot account for the problems we face in the field of education research and evaluation today. While the monies devoted to research and development have never been adequate, substantial funds (in constant 1996 dollars) have been spent on the R&D centers and the regional educational laboratories from FY64 through FY98: \$1.16 billion for the centers and \$1.59 billion for the labs. And some large—scale educational research and development projects such as Follow Through initiated in the late 1960's have cost several billion dollars—though the results have been quite disappointing substantively and methodologically.

There are at least nine shortcomings or limitations in the current educational research and evaluation efforts in the Department of Education:

- (1) While OERI has received much more money since the late 1980's, increasingly it has been spent on activities other than research and development.
- (2) Congressional mandates on how OERI must spend its research and development funds continue to hamper the ability of the agency to operate efficiently and effectively.
- (3) OERI has been plagued by rapid turnover in its top management and has not provided the necessary intellectual leadership for the field of educational research and development.
- (4) Since 1992 OERI's staff has been cut by 25 percent and the agency lacks an adequate number of distinguished and innovative researchers.
 - (5) Large-scale, systematic development is largely

absent at OERI. Many of the research and development projects at the R&D centers and the regional educational laboratories continue to be too small and uncoordinated; and the scientific quality of some of the existing developmental work leaves considerable room for improvement.

- (6) Neither PES nor OERI are providing a sufficient number of scientifically sound and educationally relevant program evaluations to provide educators and policy makers with the information they need.
- (7) While there has been a welcome expansion of field-initiated studies at OERI, more should be done to focus and coordinate some of these endeavors in order to make them more useful to educators and policy makers.
- (8) The overall quality of the research, development, and program evaluations produced or supported by the U.S. Department of Education needs improvement.
- (9) Politics continues to intrude periodically and inappropriately in the operations of OERI. While the nature of educational research, development, or evaluation makes it unrealistic to expect that all politics will ever be eliminated, the agency should be protected as much as possible from the damaging effects of unwarranted intrusions.

Given the diverse and deep-seated problems with the conduct of research, development, and evaluation in the U.S. Department of Education, what are some steps that might be taken? I would suggest that during the reauthorization process, the House and Senate consider at least seven issues:

- (1) While the periodic restructuring of NIE or OERI in the past has not always been beneficial, there are some changes that might be explored:
 - A. Following upon the earlier recommendations of Congress as well as the recent statements by OERI"s Assistant Secretary Kent McGuire, more of the Department's research and development should be concentrated in OERI. At the same time, some of OERI's technical assistance and more program-oriented activities might be better housed elsewhere in the Department. The activities of OERI should become much more heavily focused on research and development while

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simultaneously the agency works more closely with the other units within the Department.

- B. The political independence of OERI needs to be vigorously reaffirmed and protected. Some have suggested setting up an independent agency altogether; this is certainly a plausible and attractive alternative that warrants further careful examination. But other constructive steps also can be taken such as revamping the OERI Policy Board more along the lines of the current National Assessment Governing Board (NAGB) to include bipartisan representation as well as eminent and open-minded scholars from other disciplines.
- C. OERI should work more closely with other federal agencies such as the National Science Foundation (NSF) and the National Institutes for Health (NIH) on mutually beneficial research and development initiatives.
- (2) OERI needs to become more of an intellectual leader in the field of educational research, development, and evaluation:
 - A. It would be very useful if more OERI assistant secretaries had a distinguished background in research, development, or evaluation. Those assistant secretaries who do not have such training or experience should be able and willing to rely upon the agency's staff as well as outside advisors for that expertise.
 - B. The rapid turnover of most OERI assistant secretaries needs to be reduced and steps taken to make transitions in the agency smoother and less disruptive.
 - C. OERI should reappoint a Research Advisor to help the agency provide intellectual leadership and guidance.
 - D. The size of OERI's staff should be returned to its former 1992 levels (depending in part, of course, on what programs the agency will continue to oversee) and additional distinguished research and development professionals should be recruited. OERI's excepted service authority for the agency should be used to hire temporary specialists for particular needs that cannot be addressed otherwise. Existing research staff should be provided with more opportunities for substantive and

methodological training in order to help them keep up with recent developments in their field.

- (3) Although the R&D centers and the regional educational laboratories in the mid-1960's had been expected to produce large-scale, systematic development of educational practices and programs, today there is relatively little development of that type being done in OERI. After three decades of generally disappointing and limited endeavors in this area, it is time to reconsider our strategy altogether in light of our previous experiences:
 - A. We should set up a separate program for soliciting and implementing large-scale, systematic development. Initially this program might focus its energies on 3-5 long-term projects in areas such as developing reading improvement programs or helping atrisk children make a successful transition from early childhood programs into the regular classrooms. special, distinguished board of experts might oversee the progress of these development projects and ensure the scientific soundness of the work as well as its usefulness for educators and policymakers. Anyone, including the existing centers or laboratories, could compete for these demonstration projects. The open competition would not only spur existing educational research and development providers to develop better proposals, but it might also attract interest from other major social science research organizations such as the Manpower Development Corporation (MDRC), RAND, or the Urban Institute.
 - B) Since much of the existing work of the laboratories is providing research-based technical assistance to their regional clients, the labs and the Department's Comprehensive Regional Assistance Centers should be merged. As 5 of the 10 labs are already running one of the 15 Comprehensive Centers, this merger would eliminate wasteful duplication and provide more efficient and effective services. In order to provide more flexibility at the state and local levels, some of the monies saved by the merger could be distributed directly to the states and local school districts so that they could purchase whatever technical assistance they need (including purchasing additional services from the newly merged labs and comprehensive centers). In the distribution of

technical assistance monies to the states and local districts, one might want to target those funds to schools lacking the resources necessary to improve their operations and which serve the most economically disadvantaged children.

- (4) The five-year R&D centers should continue to play an important role in educational research; but they should be much larger and their work should be more focused. Rather than supporting some centers at an annual budget of only \$1.5 or \$2.0 million, the minimum size of an R&D center should be at least \$4.0 or \$5.0 million annually. Moreover, these centers should develop a coherent, focused five-year research program; centers should not have 20-30 different small-scale, uncoordinated projects scattered among a half dozen different institutions throughout the nation.
- (5) The Congress in 1994 increased the amount of monies for field-initiated research in OERI. This was a good idea and field-initiated research should be expanded in the next reauthorization. At the same time, however, OERI should target some of its field-initiated research competitions on particular educational problems by developing more focused initiatives. Perhaps a useful model to consider would be the research and evaluation work that as done in the mid-1970's and 1980's on the issue of adolescent pregnancy and early childbearing by the National Institute for Child Health and Human Development (NICHD). The targeted competitions for educational research sometimes might be most appropriately staffed by distinguished outside experts who join OERI temporarily as members of the excepted service staff.
- (6) First-rate, scientifically sound educational program evaluations have been missing all too often in the U.S. Department of Education during the past two decades. The Department should work with OERI and PES to develop a unit that initiates and oversees a serious evaluation program:
 - A) The Department's program professional staff in that evaluation unit should be knowledgeable and familiar with the latest work in rigorous program evaluations using both quantitative and qualitative approaches when appropriate.

- B) The program evaluation effort should be overseen by an independent, objective group of experts who will not only provide technical assistance, but ensure that the design, implementation, and interpretation of the evaluation is scientifically sound as well as useful to educators and policy makers.
- C) Program evaluations will vary according to the types of information needed. For the most rigorous and statistically reliable studies, the use of randomized-assignment control groups should be considered—though the much higher costs of these efforts will limit the number of studies which can be expected to employ this approach. Planned variation projects, building upon the work of the early 1970's in educational evaluation, can be profitably used in many other instances. And more limited and less costly information might be routinely gathered in most projects to provide guidance and feedback to local areas in order to help them make any necessary improvements.
- (7) Although concerns about the quality of research and development usually have not been prominent features at NIE or OERI, the 1994 legislation took an important step forward by calling for OERI, in consultation with the Policy Board, to establish "standards for the conduct and evaluation of research." OERI and the Policy Board have risen to that challenge and issued quality assurance standards and commissioned an analysis of the peer review system. Moreover, the Department of Education and OERI have been involved in an ongoing third-year review of the centers and labs which hopefully will ascertain the quality of their research and development. While it is still too early to know just how effective OERI has been in improving the quality of its research and development work, it is gratifying that the agency is now seriously addressing this important issue and Congress should encourage them to continue to do so in the future.

As one follows the history of federal educational research and development during the past three decades, one is struck by the thoughtful but often repetitive suggestions for making improvements. Almost everyone involved in these discussions seems to call for more research funding; better trained researchers; more permanent and distinguished NIE or OERI leaders; more strategic planning to meet the needs of classroom

teachers and students; more long-term, coherent research and development projects; scientifically sound research and development that is useful to practitioners; and preservation of the intellectual and political independence of the agency. Indeed, most of these recommendations have found their way into the legislative language of agency's periodic congressional reauthorizations.

Yet as we look back to what has been actually accomplished at the end of each of the four or five years, the results all too often do not match the earlier stated expectations and promises. Structural weaknesses in the design of the agency, inadequate funding, and periodic excessive congressional micro-management all partly explain the deficiencies. But some of the responsibility for the agency's shortcomings must also rest with its own leadership over the past 25 years; NIE or OERI directors have not always tried to recruit distinguished researchers or have been really committed to insisting upon high quality work from all of the agency's grantees and contractors. Nor have all members of the educational research community been sufficiently committed to making NIE or OERI a distinguished agency-especially if it has meant sacrificing their own short-term interests by subjecting their own federally-sponsored work to more rigorous evaluations or facing more frequent competitions for their funding.

Thus, the issue during this reauthorization of OERI is not just how to restructure the agency, but how do we ensure that the ideas put forth in the legislation will actually be carried out? In many ways the legislation that reauthorized OERI in 1994 was quite good and reasonable; and many of the shortcomings that have appeared subsequently might have been corrected administratively. Perhaps a large part of the problem rests with how the legislative suggestions and directives have been implemented in practice. As a result, some policy makers are becoming impatient with listening to the same, familiar promises of improving research and development in the near future when not enough has been done during the previous four or five years. educational policy makers as well as researchers like ourselves are prepared to make the necessary and often difficult decisions and sacrifices needed to make OERI into a first-rate, high quality research and development operation, we should not be surprised if some policy makers feel they might want consider shifting some of the monies and responsibilities currently allocated to OERI to other research and statistical agencies outside the Department of Education.

Finally, while a review of past and present federal

strategies for educational research, development, and statistics often reminds us of the difficulties of making significant and lasting improvement, it also provides occasional examples of outstanding success stories. The National Academy of Science (NAS) Panel in the mid-1980's was so disappointed with the statistical work of NCES that it recommended the dissolution of that entity if immediate corrective measures were not taken. Faced with that harsh reality, a few dedicated and talented individuals emerged who accepted that challenge. Working closely with the appropriate OERI staff as well as with several influential members of Congress, they managed within the space of only a few years to create an organization is now acknowledged as a distinguished and effective federal statistical agency. Given the challenges and opportunities facing OERI today, much more has to be done to make OERI a first-class federal agency. While the tasks of reforming and improving OERI will be difficult, they can be done if both the congress and the executive branch are willing to work together in a bipartisan fashion to restructure the agency into one capable of providing the high quality research, development, and statistics needed to help all American children thrive educationally in the twenty first century.

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June 17, 1999

Senate Committee on Health, Education, Labor and Pensions
House Committee on Education and the Workforce
Joint Hearings on Federal Education Research and Evaluation Efforts

<u>Testimony</u>: Alexandra K. Wigdor, Associate Executive Director

Commission on Behavioral and Social Sciences and Education

National Research Council

Good morning. I speak today on behalf of Dr. Bruce Alberts, President of the National Academy of Sciences and Chairman of the National Research Council. One of Dr. Alberts' highest priorities is to make scientific knowledge highly accessible to educators and to help build the capacity of the education system to appreciate and use this knowledge.

This year, the National Research Council released three publications that provide the basis for my comments today. Each of these reports speaks directly to the question of the potential value of research to education. The first, *How People Learn: Mind, Brain, Experience, School* was funded by the Department of Education's Office of Educational Research and Improvement (OERI). It is the product of a three-year effort by an interdisciplinary committee to synthesize what we know about human learning and to draw out the implications for schooling.

The exciting conclusion from the *How People Learn* effort is that scientific research in the past few decades has produced some important and straightforward implications for

how we can improve education and student achievement. For purposes of brevity, I will mention just two of the key findings.

Key Findings:

1) To develop competence in any discipline, students must have both a deep foundation of factual knowledge and they must understand facts and ideas in the context of a conceptual framework.

For decades we have debated whether schools need to be teaching facts, or whether they need to focus on big ideas. Substantial research on the differences between experts and novices makes it absolutely clear that both are crucial. Experts, regardless of the field, always draw on a deep, richly structured information base—i.e., facts. They are not just good thinkers or smart people. The ability to plan a task, to notice patterns, to generate reasonable arguments and explanations, and to draw analogies to other problems are all more closely intertwined with factual knowledge than was once believed.

At the same time, the key to making that factual foundation "usable" knowledge is the mastery of concepts. The concepts are what allow experts to see patterns and relationships, or discrepancies that are not apparent to novices. Not only were we wrong in thinking there is a tradeoff between the teaching of facts and of concepts, but research demonstrates that factual information is *better* remembered and retrieved when it is tied to concepts or "big ideas."

We can use geography as a case in point. Children can be taught to fill out a map accurately by memorizing information. But after the test is over, the information can quickly be forgotten. The conceptual underpinnings of geography that help explain, for

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example, the importance of water bodies to the development of cities and towns and the defining of borders will allow students to think about the geographic importance of the Mississippi River in a way that will not quickly be forgotten, and it will help students locate important cities along the river's path. Perhaps more importantly, such concepts allow students to transfer what they learn from one lesson to the next. They can look at the map of Africa with a set of questions and expectations about the geography along the Nile that will allow them to accumulate the next set of facts more quickly.

The clear implication for schools is that learning facts and concepts should go hand in hand, and we must come to terms with the notion that to achieve both, we will have to use classroom time to educate children more deeply about fewer topics. We will also need to train teachers differently, so they have a deep understanding of the link between a body of facts and the concepts that give those facts meaning.

2) A second, powerful finding is that highly competent people have well-developed processes for defining learning goals and monitoring their progress in achieving those goals.

Experts and high-achieving students make note of when they need additional information, whether new information is consistent with what they already know, and what analogies can be drawn to advance their understanding. But even though much of this monitoring goes on as an internal dialogue, the monitoring process can be very effectively taught in a classroom environment in which the teacher models the monitoring and guides students eventually along the path of self-monitoring. The research suggests that in a variety of subject areas—reading, science, math, writing—these skills improve

the achievement of all students. But they help low achieving students most. In some cases, initially low achieving students who have mastered the monitoring skills thoroughly are barely distinguishable in their performance from high achieving students.

Unfortunately, what we know from research, and what we do in practice are still distant relatives. The potential of research to influence practice has gone largely unrealized. Educators generally do not look to research for guidance for a number of reasons. The concern of researchers for the scientific validity of their findings often differs from the focus of educators on the applicability of those findings in real classroom settings with many students, restricted time, and a variety of demands.

A further challenge lies in the elaboration of research ideas at the level of detail and with the level of training and guidance needed by classroom teachers. Teachers can be persuaded of the importance, for example, of teaching both factual knowledge and key concepts. But they also need to walk into a classroom with the teaching tools and the professional training experiences that equip them to make the connection between facts and the key concepts to which those facts can be tied. Teachers need a public that understands and shares their vision, and school administrators and policy makers who support it. But such coordination of training, education materials, policy making, and public opinion takes time, and in education, new ideas often come and go with remarkable speed.

The second NRC report that I want to bring to your attention today is meant to address these concerns. Improving Student Learning: A Strategic Plan for Education Research and Its Utilization—which we refer to as the Strategic Education Research Plan or SERP—proposes to bring together teachers, researchers, administrators and policy

makers in a collaborative effort that draws on the strengths of all. The SERP goal is to focus the efforts of researchers on issues that challenge the teacher in her or his daily efforts; to bring the worlds, the understandings, and the interests of teachers and researchers closer together. The SERP proposal is that four "networks" involving each of these groups be developed and sustained over a fifteen year period, with each network assigned a "strategic" question. These questions are the following:

- 1) How can advances in research on human cognition, development, and learning be incorporated into educational practice?
- 2) How can student engagement in the learning process and motivation to achieve in school be increased?
- 3) How can schools and school districts be transformed into organizations that have the capacity to continuously improve their practices?
- 4) How can the use of research knowledge be increased in schools and school districts?

To address these questions, SERP calls for a large-scale and sharply defined program of research, demonstration, and evaluation. Much of the work will need to be embedded in school settings; all of it should be informed by the needs of the most challenging schools, in particular, high-poverty urban schools. Together, we believe these sustained efforts to translate research for classroom purposes, to transform schools into institutions that are receptive to new ideas that have a solid research foundation, and

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to address student engagement in learning, could advance student achievement profoundly.

The report proposes a new model for education research as the heart of the SERP idea. This new model has six crucial features:

- 1. promotion of collaborative and interdisciplinary work;
- 2. provision of constant, ongoing commitment on the part of core teams of researchers;
- 3. a built-in partnership with the practice and policy communities;
- 4. iterative and interactive interplay between basic and applied research in a structure that combines the richness of field-initiated research and the purpose of program-driven research;
- 5. a plan that is sustained over a long enough time for results to be cumulative;
- 6. an overall structure that is cumulative in nature—each step planned to build on previous steps.

Dr. Alberts has expressed the hope that the SERP idea will spur major new investments in education research-both by federal and state governments and by foundations and other private donors. But the SERP report does not attempt to say where this ambitious research program should be housed--whether in one or more federal agencies, a federal/state partnership, or some sort of public/private enterprise. The feasibility of the plan needs to be widely discussed. The general design features

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suggested in the NRC report need to be forged into workable specifications for a large-scale, long-term research and development program. Above all, it remains to be seen whether this plan can generate the kind of political will and financial commitment that will be needed for its operation.

The third and final NRC publication relevant to this joint hearing is a recently completed a research agenda for OERI entitled *How People Learn: Bridging Research and Practice*. Like the SERP proposal, this committee's report, developed independently, emphasizes the need for collaboration among researchers, teacher trainers, teachers, policy makers, and the public. And like the SERP committee, this committee emphasized the need to focus rigorous research efforts on classroom practice, and on the development and evaluation of tools for teachers and teacher trainers. Whether it be done in the SERP context or not, both committees agree that a much broader effort must be made to carry research findings that are well supported and convincing through to the classroom level. We cannot assume that good research will be incorporated by schools as a matter of course. School receptiveness to new ideas, and the critical features of effective school reform must themselves be a subject of serious research and intense cultivation.

It is a striking fact that in the complex world of education—unlike defense, health care, or industrial production—personal experience and ideology are frequently relied on to make policy choices. In no other field is the research base so inadequate and so little used. And the task of importing even the strongest research finding into over a million classrooms is daunting. It will take a major commitment of research effort and funding to

change current practice. But we believe that with commitment and collaboration we can use the power of science to substantially improve education in the United States.

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Presentation to the Senate Committee on Health, Education, Labor and

Pensions and the House Committee on Education and the Workforce

June 17, 1999

Chairman Goodling, Chairman Jeffords and members of the House and Senate Committee, good morning. My name is Kris Pedersen, and I currently serve as an Associate Superintendent for Prince William County Public Schools, a school district in Northern Virginia with 63 schools and 52,000 students in grades K-12. Ms. Kathy Lanzafama, Supervisor of Science for Prince William County Public Schools, accompanies me.

In 1994 the Virginia Board of Education initiated a revision of the Virginia Standards of Learning in four core subject areas: mathematics; science; English; and history and social science. Prince William County Public Schools was selected as the "lead school division" to coordinate the science standards revision. I served as Director and Ms. Lanzafama, Assistant Director. Two other individuals worked closely with me from Prince William County Public Schools, Dr. Karen Spillman, Director of Curriculum Services and Ms. Amy White, Assistant Principal at Triangle Elementary School. Under the leadership of Prince William County Public

Schools, input was solicited from stakeholders throughout the Commonwealth of Virginia to aid in this effort. The representatives in this initiative included participation by approximately forty school divisions, numerous colleges and universities, the Virginia Association of Science Teachers and many other groups representing both the private and public sectors of Virginia. This effort to develop the Virginia Science Standards of Learning was completed in 1995 after twelve months of intensive work. In Virginia these standards are referred to as the Virginia Science SOL.

In order to set clear, rigorous, and measurable academic expectations for science education in Virginia, it was imperative to reflect the very best and most current research available. The knowledge of scientific content, the processes one expects of a scientifically literate individual, and the science skills expected of Virginia's students were the points of convergence of our goal in developing these standards. Additionally, a carefully articulated continuum of knowledge was to be planned in carefully sequencing the strands of content, skills, and processes in the K-12 science standards. The standards were not to be a compilation of scientific facts to be memorized.

The review of the research funded at the federal level was most definitely a positive element and an integral component in guiding and influencing the development of the Virginia Science Standards of Learning. Numerous documents involving federally funded research were reviewed in consideration of the breadth of our task. The influence of the findings of The Science Report Card from the National Assessment of Educational Progress (NAEP), The National Science Education Standards, and Project 2061, Benchmarks for Science Literacy were particularly important to this effort. The SOL revision committee's charge was not

to prescribe specific lesson plans to Virginia's educators or to prescribe pedagogy on how to deliver information. Rather the charge was to define the body of scientific knowledge that is essential for scientific literacy in the context of the scientific method and particularly to understand the "scientific processes" in validating that knowledge. Reforms fundamental to science curricula and instruction required an in-depth review of the conceptual underpinnings of science education provided by the available research.

The federal research resulting in Benchmarks for Scientific Literacy and The National Science Education Standards were reviewed closely and greatly influenced the committee's work. In contrast to previous efforts at defining standards, this resulted in "teaching less better." The parallel findings of NAEP can be summarized similarly in that "the difference in how well one learns and the depth of understanding one is able to attain is determined by 'how' one is taught."

The National Assessment of Educational Progress 1990 Report empirically demonstrated findings through research that showed irrefutably that the methodology of science instruction is critical to the understanding attained by the learner. While that statement may not sound particularly profound, the finding indicates that the difference in learning by different methodologies of instruction varied in some cases by as much as 40%. This indicated an imperative to teach differently in Virginia's schools and had great implication in the development of standards that were not to be groupings of "facts." The text-lecture traditional method of instruction had to be replaced by a system of learning whereby students are asked to observe; classify; sequence; communicate; measure; predict; infer; hypothesize; construct models; gather information; and compare and analyze data, and then to draw judgements thereupon making a rational argument to defend a

position, explain a phenomena, or draw a conclusion. In effect, current federally funded research through such documents as the *Benchmarks for Scientific Literacy* and the *National Assessment of Educational Progress* ask for authentic learning.

In being asked today to answer the fundamental question, "Was the quality of federally funded research and evaluation efforts useful in improving and developing the Virginia Science Standards of Learning?", the answer is an unequivocal "yes" in our opinion. We fully support the continued periodic review of the "state of science instruction" in our public schools. Such review should include all facets of instruction as well as a periodic review of what is deemed essential knowledge so as to maintain high academic standards and an aggressive pursuit of excellence in science instruction. Thank you for this opportunity today to address this body who will influence this course of action.

Statement to U. S. House of Representatives Education and Work Force Committee and Senate Committee on Health, Education, Labor, and Penalons
Ruth Miles, Title I Program Specialist, Richmond Public Schools, Richmond, VA
June 17, 1999

My name is Ruth Miles. It is a pleasure for me to speak before you today. I hope I can provide some insight into your deliberation on the reauthorization of IASA, ESEA, and OERI.

Richmond Public Schools is an urban school division of approximately 28,000 students. The school division has a poverty level of almost 70%, and a majority of the comprehensive schools, 36 out of 49, receive assistance through the Title I Program.

We began implementing Schoolwide Programs in 1991, and for the 1999-2000 school year all 36 of our Title I schools will have a schoolwide focus. Initially, schools operating as Schoolwide Programs were given total autonomy in developing a plan to improve their overall instructional program. Schools chose to implement various instructional programs, and even though most of the programs implemented had a research base, this was not a requirement of the school division.

During the past five years, the school division has placed a heavy emphasis on research-based programs. This is in consent with the emphasis of the 1994 reauthorization of IASA, which recommends the implementation of Schoolwide Programs in an effort to achieve total school reform. Whereas in the past, schools had been given the latitude to select programs for their schools without central office approval, the focus on research-based programs required that all programs implemented in Title I schools have research to validate their effectiveness.

As administrators in our Department of Instruction looked at the achievement levels of our students, and weighed them against the high standards set by the state of

Virginia, we realized that major changes needed to take place in many schools in order to achieve the state's standards. With the funds available for Title I Schoolwide Programs, an effort was made to find research-based programs that had been successful with student populations similar to Richmond. The basic question raised when considering implementation of a new program became, "what does the research say about it?"

Because of the great need that exists in our environment to save more of our children "from the streets," there is no time to experiment with implementing programs that supposedly work because of a theoretical base. It is crucial that our school division implement programs that have been proven to work under circumstances similar to those existing in our schools.

When our school division learned about the availability of the U.S. Education Department's Comprehensive School Reform Demonstration Program (CSRD), we were extremely pleased because we knew that we had schools that would benefit from total school reform and that the administrators in these schools would enthusiastically pursue the funds. One thing that was appealing about the CSRD opportunity was that research had already been conducted by the U.S. Department of Education to identify 44 national models that could provide opportunities for improved student achievement in high poverty schools. The Virginia Department of Education conducted further research and determined that 26 of the models were aligned with the Virginia Standards of Learning. This presented a golden opportunity for our high poverty/low achieving schools to implement a research-based school reform program.

Information about CSRD was presented to eight of our schools that were in school improvement, and five administrators decided to assemble teams in their schools

to write proposals and compete for the grants. Schools teams gathered further information on the reform models that seemed to fit well into their environments, using research finding as a basis. After a reform model was selected, the school team, with technical assistance from central office, was responsible for writing the proposal.

Virginia limited the number of grants per school division to four, and Richmond was very fortunate to receive the maximum number.

CSRD offers the following as an opportunity for low-schieving schools to improve: (1) the research has already been conducted on a large number of reform models, allowing schools to search for ones that match their needs; (2) the recommended reform models have research that supports their effectiveness; (3) the funds are directed to the high poverty schools that are most in need of total school reform; (4) the funds are in addition to the Title I funds already allocated to the schools.

Overall, the most important thing for us is research that can be used in the classroom.

I am happy to answer any questions you may have.

HEARINGS HELD BY THE SENATE COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS

TESTIMONY TO SENATE COMMITTEE ON HEALTH, EDUCATION, LABOR AND PENSIONS, APRIL 14, 1999, BY DIANE RAVITCH

Thank you, Senator Jeffords and Members of the Committee for inviting me to testify today. My name is Diane Ravitch. I am a historian of education at New York University and a member of the National Academy of Education. I hold the Brown Chair in Education Studies at the Brookings Institution and am a Senior Fellow at Brookings. I was appointed to the National Assessment Governing Board in 1997 by Secretary Riley. From 1991 to 1993, I served as Assistant

Secretary of Education in charge of the Office of Educational Research and Improvement. Although I served in a Republican administration, I was not a Republican. As a matter of information, I am an independent, and I try to bring a sense of political independence to the important issues under consideration in this hearing today.

I was told that this hearing would focus on questions such as "what works and what doesn't work in education," how educational research can be disseminated to the classroom more effectively, and "what is the impact of education research on overall school and student performance;" These are important questions and many books have been written to try to answer them.

At one level, these are not even difficult questions to answer. As I was preparing my remarks, I had a call from a reporter at the Kansas City Star, who told me that the newspaper was about to write a series on what makes good schools. He told me that after extensive investigation, the reporters had identified these characteristics of good schools: a strong leader with the power to pick a good team of teachers and the courage to fight the system for his or her school; a clear sense of mission; high expectations for all children; a relentless focus on instruction, and especially on reading; and an involved community that supports the staff and the children. This is what works. What good research should tell us is how to make these conditions obtain in schools across the country so that all American children have equality of educational opportunity.

When I was in the Department of Education, I often heard from members

of Congress that dissemination was the biggest problem in federally-funded education research. Some members of Congress even believed

that OERI was a treasure chest of solutions and that it failed to let everyone in the nation know what was in the treasure chest. I disagree. Neither of these assertions was true then or now. OERI is not sitting on a treasure chest of solutions; there are still more questions than answers about issues of teaching and learning, school leadership and governance, and so on. And most of the controversies in education center on basic values, rather than questions of fact

or science. Such disagreements will not be settled by research.

Dissemination is important, but it is far from being the biggest problem. When education researchers have strong findings-either good news or bad news-the news reaches the mass media and travels fast. The very fact that the reporter in Kansas City could quickly identify the hallmarks of a good school, suggests that good education research has reached the public in reasonably coherent form.

The federal research function has some very specific problems, which I would like to describe today, because these are

problems that Congress has the power to correct.

 The overriding weakness of federal education research is a lack of trust, on the Hill, in the press corps, and among the public. When I was at OERI, I was told repeatedly by Congressional staff and members that the agency lacked any credibility, that it was thoroughly politicized. This reputation made it hard to recruit top-flight researchers. Based on my own experience, I did not believe this to be true, but certainly this perception was commonplace. Today, there is still a widespread perception that the federal research agenda reflects the political needs of the party in power or the interests of professional

educators and researchers. I see only one way to change that

perception, which I will describe in a few minutes.

OERI has a severe lack of qualified research staff. When I worked there, I was astonished that there were so few trained research personnel. Most of those in the agency were decent, hard-working people who understood how to process grants and manage competitions, but there was no internal research program because there were so few real scholars. The agency relied heavily on outside reviewers or outside contractors but its own internal capacity to do research, to evaluate research, or even to evaluate the recommendations of reviewers and contractors was dismally small.

3. At the last reauthorization, Congress reorganized the agency into several grandiose institutes. This amounted to a reshuffling of desks and chairs among even fewer personnel, and nothing was thereby accomplished. OERI now has five institutes, but it still does not have a sizable team of high-quality researchers, and it still is incapable of launching or managing a significant research program that would answer the questions that parents, teachers, principals, legislators, and governors have about

4. The federal education research program lacks a focused, intellectually coherent agenda. At the last reauthorization, Congress created a National Educational Policy and Priorities Board, a 15-member panel of "experts," which identified seven very broad priorities for research. As the panel's own consultant

pointed out, the

improving their schools.

Board's priorities "are often so general as to offer little specific guidance on where scarce research funds and energies should be focused"; so broad are these priorities that it is hard to imagine what areas of research would be excluded

from future consideration. Maintaining such a diffuse agenda is good for the research community, but not for the public's interest in

better schools. If one were to ask the public what it expects from federal education research, I bet that people would say that they want to know how to improve the schools so that all students are getting a good education.

5. The mission of the federal research agency is weakened and undermined by mingling research programs with an assortment of reform and improvement programs. OERI is a grab-bag agency where programs get dumped that don't fit in anywhere else in the Education

Department's organization chart. And some programs within OERI are supposed to do research, but don't. The primary example of a program that consumes research dollars without doing research are the federal regional laboratories.

When I was Assistant Secretary, the labs excelled mainly at getting more federal money for themselves, but I was never able to discern

what

contribution they made to the solution of the serious problems of American education. I proposed that they should get off the federal dole and compete for federal, state and local contracts like everyone else. This idea was, of course, abhorrent to organizations that each received several millions of federal dollars each year with nothing expected in return. Instead of giving the labs a permanent claim on federal research funds, why not give the same funds—dedicated to education research—to state education departments, and let them buy it from the best suppliers?

6. Perhaps the most worrisome problem of federal education research is the danger of politicization. Politicization occurs when the

research

agency bends to the whims of whomever is in power, when its agenda is shaped by the political needs of the Department of Education or by the

self-interested pressures of powerful lobbyists. When this happens, the credibility of federal research and statistics is destroyed. Congress created the National

Educational Policy and Priorities Board to insulate the agency from political and interest group demands but it was not enough.

OERI is still part of the Department of Education, NCES is still part of the Department of Education, the National Assessment Governing Board—which oversees NAEP—is still part of the Department of Education, and the national priorities board represents the education research establishment, not the public.

For better or worse, education has become a hot political issue. Each party makes claims for the power of its educational plans, and we can anticipate that there will be repeated attempts to distort educational data to impress the public. It does not happen often, but whenever it happens, it undermines the credibility of the entire federal research, evaluation, and assessment program.

Unfortunately, the release of NAEP reading scores a few weeks ago provided an opportunity for Vice-President Al Gore to make unsubstantiated claims of progress. He dominated the NAEP press conference, asserted that scores had increased between 1994 and 1998, and urged Congress to enact the Clinton-Gore education

programs. What he said was only half-true. He was followed by Pascal Forgione, Jr., the Commission of Education Statistics, who pointed out that while the reading scores had gone up from 1994 to 1998, there had been "no net gain" between 1992 and 1998 for those in fourth and twelfth grades. In addition, NAGB's policies specifically dictate that there should be no partisan or political intervention in the release of scores. Once the scores have been released, political figures can say whatever they want. But the initial release is supposed to be just the facts, nothing but the facts, without any unwarranted interpretations or political statements.

When I wrote about this event in an article in The Washington Post, the Secretary of Education responded by repeating the administration's original assertion that scores had increased from 1994 to 1998, which was beside the point and served only to reiterate the original half-truth.

From all of the foregoing, I have concluded that the federal research, assessment, and statistical functions can serve the public

interest

only if they are insulated to the greatest extent possible from the political leadership of the Department of Education, regardless of which party is in power, and from the self-interestedness of education organizations. Both Republicans and Democrats should commit themselves to this goal.

I urge your Committee and the Congress to consider creating an independent agency for federal education research, evaluation, assessment, and statistics. For the sake of discussion, I will refer to it as the Office for Educational Audits. This agency would provide a home for the National Center for Education Statistics, the National Assessment Governing Board, the National Assessment of Educational Progress, and a reconstituted Office of Research. The Office of Research would engage in long-term research on important issues related to the improvement of teaching and learning, and would also evaluate federal education programs, including those in the Department of Education, the National Science Foundation, and other federal agencies. This auditing agency should be overseen by an independent, bipartisan board that includes governors, legislators, employers, and other public-spiritied citizens. rather than research experts who may have real or potential conflicts. The leadership of this new agency should be appointed by the President, as the Commissioner of Education Statistics currently is. All 'action' programs for reform and improvement including the regional education laboratories, should remain with the Department of Education. But those functions that must be strictly isolated from political direction should be strictly removed from political direction.

If the American public begins to think that the federal government is unable or unwilling to evaluate its own programs; if it begins to think that NAEP scores are being spun to serve the interest of a particular administration; if it begins to believe that the findings of research are distorted by political considerations, then the federal investment in research will be wasted. Losing public confidence in the federal government's

ability to study education impartially would certainly damage the reputation of the government and of education research. Worse, it would be a tremendous disservice to American education and to our nation's children. The chance for fundamental change is now. It would

be a grave mistake to lose this opportunity. >>

SENATE HEALTH, EDUCATION, LABOR AND PENSIONS COMMITTEE MAY 12, 1999

Thank you for the opportunity to provide input with regard to the important work your committee will be dealing with as you review and consider amending Title I and the Elementary and Secondary Education Act.

As you may know, Delaware's Governor Thomas R. Carper is the 1999 Chairman of the National Governors' Association and their theme for his tenure is education. Our Representative Michael N. Castle is Chairman of the Early Childhood, Youth and Families Subcommittee of your committee. So Delaware leadership will be directly involved in the work of your committee.

The Delaware Department of Education strongly supports the reauthorization of the ESEA. The financial support from this program is critical for Delaware students to continue their improvement of academic performance. The student population which benefits the most from this supplemental federal support is students at risk of school failure. This legislation supports these students through direct instructional services, professional and paraprofessional staff development, opportunities for educational innovation, expanded uses of technology in the classroom, the purchase of supplemental instructional materials and equipment, and safe and drug-free schools. This federal support is essential for our continued progress in improving student academic performance. We feel the support received through these programs over the past years has been of great assistance to the students most at risk in Delaware.

The following are items we consider needing special attention:

- Use of non-certified staff personnel to provide instruction in Title I programs We believe that the use of paraprofessionals to assist instruction is both appropriate and effective if certain conditions are met. The conditions include (1) training for paraprofessionals that leads to an appropriate certification as such, and (2) development of and staff development for school staff on teaching models using teachers and paraprofessionals.
- Schoolwide We recommend that the eligibility requirement for Title I Schoolwide may be lowered below the 50% poverty level only if an accountability requirement for student/school performance is met during the first two years of implementation. We further believe that schools below the 50% level should be required to request a waiver from the SEA.
- Students served Title I funds should continue to focus on the most academically needy children in schools. The funding should be allocated on the basis of poverty in the school and by formula.

Our state Title I program is fully aligned with and is an integral part of the Delaware State Accountability System. Delaware now has in place a rigorous set of standards in English, math, science, and social studies. The requirement for graduation has been increased from 19 to 22 credits—adding credits in math, science and technology.

Last spring, students in grades 3, 5, 8, and 10 were tested against the new standards in reading and math. Students in grades 3, 5 and 8 scored at or above the average in reading and mathematics, while tenth graders scored just below national norms.

These early results tell us that we are on the right path, but we must redouble our efforts to ensure that future student performance improves.

This summer, after two administrations of the test, the "passing" and "failing" points for the Delaware Student Testing Program will be determined.

Recognizing that all students don't learn at the same pace. Delaware provides resources to allow the lowest achieving students up to 20 additional days of learning time after school, on weekends, or whenever time is available.

Guiding principles of the accountability plan

- The most important function of the Delaware public school system is to produce graduates with outstanding skills and knowledge in the core academic subjects – English/language arts, math, science and social studies.
- Reading is the most important learning skill. The second most important learning skill is math.
- The social promotion of students deficient in reading and math is wrong and must end.
- Students who perform well should receive recognition for high achievement.
- Delaware should provide rewards for high-performing schools and consequences for holding poorly performing schools accountable.
- New teachers should meet pre-service standards, and the performance of all teachers should be evaluated at the local level.
- Local school districts should remain primarily responsible for professional and staff development.

The Delaware Department through the efforts of Title I has initiated a School Support System that assists, in collaboration with state reform efforts, District and School implementation of the state reform. The support system is implemented in the context of a state encouraged continuous school improvement process, whole school plans in all schools supported by funds in the consolidated application, and required school and district evaluations of program goals. The components of the Support System are as follows:

- (1) A Consolidated Grant Application that provides Districts the opportunity to apply for federal and state funds to implement an educational program that will increase the achievement of all students, especially those who are the most academically needy. The application contains the following programs: Title I (Part A & D), Title II Eisenhower Professional Development Program, Title IV Safe and Drug Free Schools, Title VI (Innovative Programs), Goals 2000. Carl Perkins Voc. & Applied Tech, Ed. Act-Secondary, Curriculum and Professional Development Grant (state), Extra Time (state), School Climate: School Based Intervention (state) and Teacher to Teacher Cadre (state).
- (2) A Quality Review Process that is an annual review of District and school programs that are supported by programs funded through the Consolidated Grant Application. The Quality Review is conducted by staff from DOE and a parent representative.
- (3) A cadre of DOE staff (Consolidated Application Liaisons) that assist schools in the completion of the Consolidated Grant Application serve as the contact for the District Quality Review and a broker of DOE services to support district and school improvement.
- (4) A cadre of Distinguished Educators who are exemplary practitioners and consultants who have the expertise to assist district and school improvement.
- (5) Funding Grants dedicated to assisting school improvement. They are Title I School Improvement Grants, and Comprehensive School Reform Grants.

Again I wish to thank you for the opportunity to provide input relative to the work your committee will be involved in over these next months as it reviews the Elementary and Secondary Education Act. If I can be of further assistance to your committee, I will be pleased to do so.

Biographical Summary

Iris T. Metts, Ed.D.
Secretary of Education
State of Delaware

When the governor of Delaware appointed Iris T. Metts in 1997 to be the state's first Secretary of Education to lead education reform, he chose a progressive professional with a 30-year record for innovation and improvement in education and educational systems.

Dr. Metts distinguished herself as superintendent of schools for the Christina School District of Newark, Delaware from 1990 to 1997, managing a nationally-recognized school program of more than 20,000 students. She is credited with dramatically improving its financial position and budgeting process, and instituting collaborated contract negotiations and an award-winning program to monitor student progress. She launched six innovative magnet schools and introduced computer labs in all schools. She instituted diversity training for faculty and staff and the development of a five-year strategic plan. She expanded volunteer mentoring by community and business volunteers, reestablished an endowment fund, and presided over receipt of significant grants to implement model programs. Previously, as assistant superintendent of the Evanston/Skokie School District 65 in Evanston, Illinois, she managed the operation of a multi-ethnic school district. In her current position she has led the effort to develop a nationally recognized accountability and assessment program.

A graduate of Hampton University, she received her Master's degree from The College of William and Mary, Doctorate from Virginia Polytechnic and State University, and did post-doctoral study at Harvard University. She has held leadership positions in numerous professional and community service organizations and has received several awards for leadership and community service in Delaware.

THE FEDERAL ROLE IN R, D, &D: A VISION OF THE FUTURE

By CHRISTOPHER T. CROSS

As we begin ticking off the months, days, and even hours leading to the 21st century, the education profession faces one of its most perplexing dilemmas: How do we move solid -research-based work into implementation?

On the one hand, we seem to have a policy audience that is hungry for research-based proven practice information. This hunger is driven largely by the success of the National Institute of Child Health and Development (NICHD)'s work on reading and by the Obey-Porter provisions of the 1998 federal appropriation bill setting aside \$150 million for the implementation of research-based school reform models. That provision was, in turn, driven by the work of New American Schools and reformers like Bob Slavin and bis "Success for All" program.

On the other hand, the federal budget for education research through the Office of Education Research and Improvement (OERI) of the U.S. Department of Education, the designated research agency, is at what must surely be its lowest point in the past 30 years both in terms of the percentage of Federal and of total spending on education. How can this paradox exist?

In many ways these non-OERI efforts have both created demand and helped redefine what we mean by education research and raise the standards for quality research in education. It may not be too much to say that the education research field will never be the same because of these two efforts.

In my nearly 30 years in Washington working on issues related to education—mostly on education research and policy—never have I encountered such excitement about the potential, and such pessimism about the reality, of existing dissemination, technical assistance, and implementation systems.

Interestingly, all of this is happening as we approach the time to reauthorize OERI. Almost eight years ago, when I was serving as Assistant Secretary for OERI, I kicked off the last reauthorization cycle by asking the National Research Council at the National Academy of Sciences to undertake a study of OERI. That report, issued in 1992, was among the forces which led to the 1994 reauthorization, which included the creation of the five existing research institutes and the Office of Reform Assistance and Dissemination (ORAD). The issue is not so much the creation of the institutes as is the fact that none of them have "critical mass." To be viable each would need a budget in the range of \$50 million and a staff of at least 50, including a number of senior, visiting scholars.

Let me be quite clear in saying that I believe the 1994 reauthorization, which was based in part on the 1992 NRC report, created a disaster. It has led to less communication and coordination, unhealthy competition for very scarce resources, excess overhead expenses, and Balkanization that would make Eastern Europe proud!

The reorganization that followed the 1994 Act took place at about the same time that the Department of Education was being downsized through employee buyouts, yet another complicating factor, and during a period of extreme instability in leadership. Kent McGuire became Assistant Secretary in June of 1998 after at least four people had held the job in acting positions since the departure of Sharon Robinson in 1996.

Although the Federal government contributes only a small fraction of the nation's financial support for education, that support generally establishes both tone and leadership and, quite often, structure. For example, the organization of the U.S. Department of Education is generally mimicked at the state and local level. However, in education research and statistics, the role and position of the feds is paramount in financing, structure, and substance.

Indeed, within the Federal government—even within the U.S. Department of Education—there are multiple pockets of research. There are also pockets of program evaluation (some quite large) that, in all honesty, are often research masquerading under a different title. Research goes on in the Offices of Vocational and Adult Education, Special Education, and Postsecondary Education. Evaluation of both Federal programs and issues like charter schools takes place in the Office of the Deputy Secretary, and occasionally in other places. If all of these pockets were stitched together, one would have a large, if unsightly, garment.

Since the mid-1960s, attempts have been made to coordinate all of these activities, generally without measurable success. The lobbies for each of these areas become fiercely protective if their domains seem threatened.

On the one hand, having all of these separate pockets has unquestionably resulted in greater appropriations and better results for children than if all were centralized and thus seen through a single lens or controlled by a single bureaucracy. The counter to this is that from a consumer viewpoint, this is a very, very messy system, one that often leads to confusion, frustration and the inability to get information when it is needed, in a form which is useful and in language that can be understood.

With this as background, it is entirely appropriate to consider what might be done to straighten out the mess that now exists, and, more important, to actually design a RD&D system that will build both on the good and bad experiences of the past, and anticipate the needs of schools, teachers, and policymakers in the next decade.

What should be done? What can be done? Here are some ideas.

• Create better-educated consumers.

One of the problems faced at all levels is that the average consumer of information simply doesn't know whom to believe, or what research to trust. To quote Marcy (or is it 5y?) Syms, "An educated consumer is our best customer." This is as true in education as it is in retailing. That means that a consensus needs to be developed about what represents good work. The National Institutes of Health long ago mastered this process in its efforts to establish danger zones for such things as cholesterol and high blood pressure through a consensus development process. Much can be learned from them.

Of course, the question of an educated consumer is very complex. First, however, there must be quality research available that the consumer can trust. We also must specifically educate teachers and administrators in how to access and use good research. While ERIC has been in existence for decades, it has no quality screen and provides little training.

We also need to create and document models of what research-based decision-making looks like so that others will understand the concept and see the potential for improved outcomes through better decision making.

• Take this function out of the U.S. Department of Education and create a new Agency for Learning.

That move would take research and the data collection out of the current OERI organization, leaving the dissemination and program improvement activities. This new Agency for Learning would be free standing, much like the National Science Foundation or the National Aeronautics and Space Administration. Also remaining in the Department of Education would be the program evaluation function that is located in the Office of the Deputy Secretary.

The head of this new agency would serve a six-year term, nominated by the President and confirmed by the Senate. Removing education research from a cabinet agency and giving it "permanent" leadership would be important symbolically, as well as in the actual work of the agency.

This new agency would be organized, not by legislation, but by the demands of the field. For example, if a major current issue is reading, then a "strike team" on reading should be created. If there is a need for long-term, large-scale research on the achievement of Hispanic students, then a team should be assembled that has the skills to handle the research protocols and deal with the policy issues involved. The important element here is that the legislation would not specify the organizational structure. That would be determined periodically by an assessment of the needs of the field. Specific structures would need to be created to assure that research information emanating from this new agency would reach back into appropriate places in the Department.

• Eliminate the current OERI Research Priorities Board.

It has never fulfilled its mission. In its place, I would create a new board composed of a handful of people representing the National Academy of Education, the National Academy of Sciences, and the top civil service people from the major program research and evaluation offices in the U.S. Department of Education and other agencies with significant research programs that impact teaching and learning, such as NIH, NSF, NEH, DoD and NEA.

• Restore the authority to hire distinguished scholars.

One thing that has been lost over the last 25 years is the ability to bring in distinguished scholars for periods ranging from a few months to two years. That exempt personnel authority was enormously important in the early days of the Federal effort that began with NIE. I would restore that authority, but add an accountability system that would prevent it from being used simply to escape the personnel system's complexities for "regular" hires. The new policy board should oversee the proper use of this authority.

• Use technology to increase communication and decrease duplication of work.

The explosion in communications technology has had a substantial impact on education in the past decade. In the next decade that impact will be profound.

For the field of education RD&D, the only question is whether to lead or to be led by these changes. Technology permits the kind of communications and collaboration among Federal agencies that was impractical in the past. One way to capitalize on this is to link every Federal agency doing work in the field into a central repository of information. In this way, the latest research from NICHD in reading, from NIH on brain research, from NSF and DOD on their work that impacts learning, would be available to every other Federal agency. As a part of this system, a responsible official in each agency would have to certify that no other Federal agency was doing similar work, or, at the very least, that all parties had coordinated their research efforts and have pledged to coordinate their dissemination efforts.

This would enable Federal dollars to be much more wisely invested, would greatly reduce duplication and redundancy, and would result in more complete information reaching the field.

Then, I would radically restructure efforts aimed at assisting the field by making the best possible use of technology.

Currently, the U. S. Department of Education operates a confusing array of technical assistance arms, ranging from the OERI labs to similar organizations in Title I

and in special education. Although some attempts have been made to merge them, most of these technical assistance arms still remain; and because of the way they are structured, a school or district might receive different information about the same or similar problems from different providers.

Although not perfect, the medical field largely solved this problem some time ago with the creation of MEDLINE; the legal field with LEXIS. Other professional fields have similar systems. In education, ERIC was an early entrant. Today, ERIC needs not just an overhaul, but a major reconceptualization. For example, with the advent of video over the Internet, we can now move from simple words on a page to actually seeing what works, talking with experts, and creating online, real-time expert sessions. We can do things never even conceived of only a few years ago.

However, it is conceivable to move far beyond ERIC to create a new, nationwide technological resource that would harness the best features of technology. It would work by creating everything from "chat rooms" organized by subject and grade level, to online broadcasting of actual examples of excellent student work, excellent teaching and superb professional development. The capabilities that exist today are not being utilized in any significant way to improve the skills of those who instruct children and lead schools. Although we may still question how effective technology might be in improving student learning, the impact on adults is clear: technology is being used quite effectively to deliver training in everything from medicine, to engineering, to law. What we have not yet done in education is create the needed software. To do that we must look outside of our own narrow world to see what is being done in other fields, and often in other nations.

What I foresee in five years is a school where teachers have available on their desktops immediate access to information on the latest research, the best methods for teaching a topic, and access to museums, zoos and libraries around the world. After school, teachers might go home, turn on their computer, enter chat rooms to talk with other teachers about work done by students in response to an assignment, confer with a behavior expert, observe the teaching of a lesson, ask questions of a resource person at a federal lab or sign-up for a two-day seminar. The result would be to break down the barriers that isolate teachers into separate classrooms and limit interchange with others and the sharing of knowledge and best practices.

What roles, then, would be played by the regional labs, and national research centers, and other Federally sponsored entities in supporting this school of the 21st century?

First, regional labs as we know them today would cease to exist. They would be replaced by a set of institutions that manage resources, respond to field requests, and coordinate resources with other labs and centers; information would be shared, not husbanded-all in the interests of improving student learning. Each of these institutions would receive core funding and an amount based upon service, or, in the case of research centers, based on information provided or knowledge created. The use of state and local agencies for service would stop as services became focused on direct assistance to teachers and

to link between labs and DER on what heanin educators. Research would be driven by the needs expressed by the field, much as health research budgets are keyed to the treatment, prevention, and eradication of identified diseases.

Second, the above-mentioned information would be equally available to parents, so that they would know what represents good practice and how to research a problem their own child might be experiencing. That information would also assist parents in home schooling their children; in fact, tests to determine their children's progress might be available for purchase at a web site. This would also help hold schools accountable.

Field-initiated research would become much more important; most funding, however, would be used to support studies in the priority areas determined by the board.

While NCES would continue to exist within this new Agency for Learning, a parallel organization would be created to analyze and interpret NCES data. This National Center for Data Analysis would have the mission of mining the enormous amount of data collected in TIMSS, NAEP, SASS, and the various longitudinal surveys. One of the tragedies of today is that so much data is collected that is never analyzed thoroughly and the connections are not made across studies. For example, we might learn more about student achievement by having teachers of students tested by NAEP included in the survey of teachers.

Finally, what about funding?

We have been woefully under-funding this field for decades. Agriculture, health, nutrition, and science all receive far greater appropriations from the Federal government. To solve this problem in perpetuity, one percent of all education program dollars would automatically be appropriated for the support of this area, including statistics and data collection. States would be encouraged to supplement the Federal appropriation with state funds allocated to specific studies. Private sources, such as foundations, would also be encouraged to be partners in specific studies. Legal authority would be provided to permit non-Federal staff to be co-project directors on studies that are co-funded.

An ambitious plan? Yes. However, it is a plan directed at serving the best needs of the education profession, and through them, the children of this nation.

BROOKINGS CONFERENCE PAPER

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SCHOOLS, GOVERNMENT, AND THE FEDERAL ROLE IN EDUCATION

The action in Kurt Vonnegut's novel *Cat's Cradle* is driven by an effort to protect the world from *ice nine*, a form of water that is solid at high temperatures. Normal water is transformed into *ice nine* upon contact, so that a drop of it can freeze an ocean and an animal that drinks or breathes it is instantly frozen solid.

Has the federal government been the *ice nine* of K-12 education, inexorably transforming public schools from intimate community assets into complex, impersonal, rule-driven institutions? This paper will argue in the affirmative. Contact with the federal government has not transformed schools as absolutely, or to as disastrous an extent as Vonnegut's book portrays contact with *ice nine*. But many of the weaknesses of today's public schools are caused by their forced adoption of attributes common to bureaucracies and regulated industries, and not previously common to schools.

This paper argues that the federal government can eliminate the aspects of its program that weaken schools without abandoning its commitment to equal educational opportunity for poor, minority, and handicapped children. Federal policy can be rebuilt on the premise that no program or rule must burden schools if there is any other way to reach a public objective.

Since enactment of the Elementary and Secondary Education Act in 1965, federal programs and related state and court actions have made schools more like standard government institutions in three ways, by forcing schools to:

Become operators of programs and appliers of rules, rather than intimate communities;

Cope with a complex political environment engineered by courts, bureaucracies, and legislatures;

Operate under constraints imposed by flawed proxy measures of equity that facilitate government oversight but interfere with effective instruction.

These government-imposed preoccupations differ from schools' specific mission, which is to instruct, inspire and nurture children. Are government and good schools completely incompatible? This paper will answer no, schools can certainly be both public and good. However, we Americans have now gone too far in patterning schools on other government institutions, and are paying the price, as public schools become more formal, politicized, and regulated, and less effective.

The federal government had good reason to become engaged with the public schools when it did, in the aftermath of the *Brown* decision in 1954, and not all the consequences of government involvement can or should be reversed. Before the federal government accepted a role in K-12 education, schools in white areas had no obligation to admit African-American students or anyone else who was "different." Schools could readily give up on children who were slow to learn, and severely handicapped students could be excluded altogether. Federal intervention in K-12 education has made it illegal (if still not rare) for schools to discriminate on the basis of color, and to exclude handicapped students. These gains are real and no one suggests that America reverse them now.

But has federal policy made the *schools* better, i.e. has it improved the average quality of schools available to the children that attend them? The answer is surely not a clear "yes." Government has succeeded in what it can do best, which is to create broad movements, make investments, and redistribute opportunities. But it has not succeeded in doing what it is seldom good at, which to create intimate, imaginative, and highly productive institutions.

Good Schools and Government

Good schools are intimate places, where teachers and other adults stand in for parents, but with a special responsibility to make sure children learn things they will need to function as adults. Schools have definite ideas about what students should learn at a particular time, and most assume that groups of children can learn together.

However, recognizing that every child develops at her own rate – and that a child who has mastered one set of skills can struggle with another – good schools leave room for individualization. Because it is impossible to anticipate everything necessary to help a child or a group of children learn, good schools are flexible. Neither students nor teachers

can be programmed in advance. Schedules and job descriptions cannot prevent a school, or an individual teacher, from doing whatever is necessary at the time. Though no school can do everything, a good school is flexible and it deploys its staff members to the best advantage of students. To the degree possible, every child gets access to the teacher or instructional experience that she needs at a particular time.

No good school ignores a child because of her race gender, or physical abilities. However, no school is good just because it does not discriminate or promote invidious relationships among people. A school is good because it nurtures and guides all children and teaches effectively.

People who, like the present author, attended both public and Catholic parochial schools, are often struck by two competing perceptions. First, on average, Catholic schools now have higher academic standards and are more communal, focused on instruction, and coherent than public schools. Second, Catholic schools are not much different now than they were 30 or 40 years ago when most people considered them mediocre. How to reconcile these perceptions? The answer is that the Catholic schools have stayed roughly the same, or improved slightly, while public schools have declined.

Some contrasts between today's Catholic parochial schools and their neighboring public schools illustrate the ways in public and Catholic schools now differ.¹

Catholic schools have missions stated in terms of the kinds of the knowledge, skills, and values of the graduates they intend to produce. Public schools are organizations that run externally-mandated programs.

Catholic schools recognize the differences among children but regard these differences as at most temporary impediments to the student's learning the knowledge, skills, and habits that the school intends to impart to all students. In contrast, public schools classify students as handicapped, language minority,

¹ See, for example, Coleman, James S. and Thomas Hoffer, Public And Private High Schools: The Impact Of Communities, New York: Basic Books, 1987., and Bryk, Anthony S., Valerie E. Lee, et. al, Catholic Schools and the Common Good. Cambridge MA, Harvard University Press, 1993; Hill, Paul T., Gail E. Foster, and Tamar Gendler, High Schools with Character, Santa Monica CA, RAND, 1990; Crain, Robert L., The Effectiveness of New York City's Career Magnet Schools. Columbia Univ., New York, NY. Institute on Education and the Economy, 1992; Gamoran, Adam, "Do Magnet Schools Boost Achievement?" Educational Leadership, v54 n2 p42-46 1996); and Hill, Paul T., Lawrence Pierce, Paul Schneider, and Sara Taggart, Schools' Integrative Capital, Seattle, University of Washington Center on Re-Inventing Public Education, 1998.

gifted, etc. and offer distinct programs of study for different categories of student.²

Teachers and administrators in Catholic schools are jointly responsible for the school's results, while public school teachers and administrators are responsible for their specific personal tasks.

Staff members in Catholic schools are employees while staff members in public schools are civil servants who work under formally written job description sand collective bargaining agreements that spell out everything from hours of work to what students they can serve.

The point of these contrasts is not to praise Catholic schools but to trace the effects of government on public schools. Before federal elementary and secondary education programs were enacted, public schools had far fewer separate programs. Children were not classified according to guidelines set by regulators outside the school, and schools did not have to compete for teachers' allegiance with external funding sources, administrative units, or unions.

Not all of the policies, programs, rules, and contractual provisions that have weakened schools were initiated by the federal government. Some are the results of litigation, some come from collective bargaining, and some come from state laws established in imitation of federal statutes. However, it was federal government programs and initiatives that introduced the idea that government could act on some parts of schools and not others, introducing programs for some children and not others, different rules to control the work of different teachers, and central office coordinators who would choose and supervise some teachers.

All major federal initiatives in K-12 education stemmed from the *Brown* decision, which first construed school enrollments as state action and established that discrimination denies children their rights under the 14th Amendment. Though many federal policymakers have understood that non-discrimination does not in itself make a good school, most major federal programs started as anti-discrimination measures. The largest federal education program, Title I of the Elementary and Secondary Education

² Even today private schools use the concept of "disabilities" very sparingly because there is no government fiscal or regulatory structure to push them into classifying students. Nobody denies that there are children with special needs, and that they appear in all schools including private schools. But the label "special education" has now become so elastic that it now includes children who would, in the absence of a federal program, be assisted by their regular classroom teachers and never considered "different."

Act, was meant to overcome school districts' perceived habit of neglecting the needs of low-income and minority students. Federal programs for the handicapped and limited English speaking students were patterned after court orders resulting from lawsuits that alleged denial of equal protection of the laws. Aside from the large funding programs, the most conspicuous federal activity on K-12 education has been the enforcement of anti-discrimination statutes by the Office for Civil Rights. Though it has also mounted small programs intended to train teachers, conduct research, or develop new instructional methods, compared to the big group-oriented programs, these have received miniscule amounts of funding and have had short, uncertain lives.

Can we sustain our national commitment to equal educational opportunity for all without weakening schools? The final sections of this paper will say yes and suggest principles for a new federal role. The three sections immediately below will show how government policies have made schools more formal and complex; engineered political pressures that distorted schools' operations and priorities; and imposed requirements that facilitate oversight by legislatures, bureaucracies, and courts yet impede effective instruction.

FEDERAL PROGRAMS MAKE SCHOOLS FORMAL AND COMPLEX

The *ice-nine* of government policy has made it difficult for many schools to retain the characteristics of good schools discussed above. Public schools that receive federal funds are organized around programs, each designed for a given category of students; students are instructed accordingly. Teachers specialize, taking responsibility for particular instructional routines and for the students classified as needing or entitled to them. How did this happen?

Forcing Students and Teachers Into Categories

Until the 1960s, elementary and secondary education policy was considered "off limits" for the federal government. President John F. Kennedy strove to establish a program of general federal aid to education, but his effort foundered politically on the issue of whether Catholic schools would also benefit from federal funds. President Lyndon Johnson found a way to get around the church-state barriers, via a new theory of federal aid, the "child benefit theory." Under this theory, the federal government could pay for services to children without increasing funding for schools. Thus, federal funds could benefit children in Catholic schools without supporting religious education. Under the same theory, federal funding for public schools could be shaped in ways that encouraged educators to place greater priority on the education of children who, because of their poverty, racial minority status, or other characteristics, had not been the primary concern of local schools.³

Under the child benefit theory, Title I was not designed to improve schools as wholes. It supported only extra services, or the purchase of equipment, for special programs for specified populations. Special staff members provided these services and used equipment paid for from federal program funds. Children for whom federal programs were not specifically intended were not supposed to benefit in any way from the goods and services thereby provided.

In the first decade of its existence, Title I was a clear political success, providing funds to every Congressional district and the vast majority of school districts, dominating

³ See, for example, Hughes, John F., and Anne O. Hughes, Equal Education, A National Strategy, Bloomington, Indiana University Press, 1972, ch. 2.

⁴ There were small federal programs intended to help schools and districts improve classrooms and teaching methods and, for a time, the federal government subsidized the training of teachers no matter where they chose to teach. But such initiatives lacked the political appeal of intervention on behalf of children who had suffered neglect or discrimination, and they were not nearly as stable or as well funded as the Title I-style programs.

the time and attention of local administrators,⁵ and generating research and publicity. Though the program's effectiveness in raising student achievement was not clear, its effects on changing patterns of service delivery were evident everywhere. Title I could not fund services for every disadvantaged child, and its services were normally focused on reading and arithmetic instruction in the lowest-income schools.

Title I also demonstrated the federal government's power, via threats to cancel grants that local schools had come to depend on, to force reallocation of state and local funds. School administrators who had resisted Title I as an unwarranted exercise of federal power were succeeded by people who bought into -- and became expert at administering -- federal programs.

Other federal programs have built on this politically successful model. ESEA now contains more than 60 programs in addition to Title I, funding services for students with limited English proficiency, Native Americans, migrants, and supporting school safety, magnet schools, diverse teacher training initiatives, and many other purposes. In the mid-1970s a major new program for the handicapped built on the Title I example, and the pre-existing Vocational Education program came to imitate it. To varying degrees, these programs all required separate and distinct services for their beneficiaries and forced equal use of state and local funds.

Federal programs were not the only acts of government that transformed schools. States enacted additional programs modeled on Title I, each targeted to a category of student, teacher, or service. State-funded programs often supported similar services for disadvantaged children in elementary and high schools not covered by Title I. Litigation in federal courts led to decrees affecting how schools are organized, staffed, and operated.

Contracts between school boards and teacher unions also contributed to the formalization of schools. At about the same time Title I and its imitators were changing the nature of schools, many local school boards found that they could no longer meet teacher unions' salary demands. They started to offer unions concessions over teacher

⁵See, for example, Hannaway, Jane, "Administrative Costs and Administrative Behavior Associated with Categorical Programs", Educational Evaluation and Policy Analysis; v7 n1 p57-64 Spring 1985; Hannaway, Jane, and Lee S. Sproull, "Who's Running the Show? Coordination and Control in Educational Organizations", Administrator's Notebook, 1978, v27 n9 p1-4 1978-79.

work rules, policies on teacher assignment, limitations on teacher responsibility outside their classrooms, and constraints on school principals' management discretion.⁶

Limiting Teacher Responsibility

Title I and subsequent federal programs introduced something that schools had never before encountered: programs and funds controlled outside the school, providing staff and equipment that are sent into the school to perform particular purposes.

This arrangement ensured that federal program funds could be tracked to identifiable adults, whose activities could be readily described to federal program auditors and evaluators. The down-side of this arrangement was that programs developed on a district-wide basis often did not consider the specific needs of individual schools. Specialized teachers might not use the same teaching methods and present material on the same schedule as regular classroom teachers. Principals and classroom teachers had no formal authority to demand that the specialists collaborate with them, though many did so successfully on their own.⁷

As the number of federal programs increased (and as state legislatures enacted additional programs patterned after Title I), schools (especially those in poverty areas eligible for several separate programs) were served by increasing numbers of specialist teachers who did not work for the principal and did not need to coordinate with regular classroom teachers.

Classroom teachers' responsibility for individual children's learning was diluted, as more and more of their students' instruction was provided outside the classroom and by others. A teacher who could not expect a child to attend her reading class every day -- and whose students might be confused by things they are taught elsewhere -- was not clearly accountable for what that student learned. Similarly, a principal who could not coordinate teachers' schedules and methods -- and had little to say about who was assigned to teach in the school or whether teachers who had become school mainstays would be abruptly transferred out --could not be expected to run a coherent instructional program.

⁶ See McDonnell, Lorraine, and Anthony Pascal, *Teacher Unions and Educational Reform*. Santa Monica CA, RAND, 1988. See also McDonnell, Lorraine, and Anthony Pascal, *Organized Teachers in American Schools*, Santa Monica, CA, RAND 1979.

⁷For a detailed account of these problems and schools' responses see Kimbrough, Jackie, and Paul T. Hill, *Problems of Implementing Multiple Categorical Education Programs*. Santa Monica, CA, RAND, 1983.

In light of consistent research findings that disadvantaged students learn more in schools that are unified around a clear instructional mission, pressure to reverse the fragmenting effects of federal programs has been strong. Congress and Federal Title I administrators recognized this as a problem as early as the late 1970s, and progressively softened the requirement that program services be distinct and easily identifiable.

However, the basic pattern was set. Simplification of Title I and other program regulations (starting with the Educational Consolidation and Improvement Act in 1980) has continued to the present time. Efforts to strengthen schools, however, constantly struggle against the centrifugal tendencies created by federal and state program requirements and work rules established in union contracts. Despite the many efforts to strengthen and unify schools, it is now virtually impossible to place all of a public school's administrators and teachers into the same boat. Different adults owe loyalty to different program administrators in the central office; many have work rules that limit their obligation to invest time in overall school improvement; and (despite the heroic voluntary efforts of many individuals) many have job security that allows them to resist school-wide improvement efforts that might require changes in their teaching practices.¹⁰

As schools are increasingly patterned by the *ice-nine* of government, they progressively lose their integrity as organizations. Assets (staff members, equipment) are added to or subtracted from schools. Constraints in the form of new goals, performance quotas, testing programs, and regulations governing treatment of students and teachers, are imposed on schools by school boards, central office administrators, and

⁸ See for example, Newmann, Fred M., et. al., Authentic Achievement: Restructuring Schools For Intellectual Quality, San Francisco, Jossey-Bass, 1996; Coleman, James S. and Thomas Hoffer, Public And Private High Schools: The Impact Of Communities, New York: Basic Books, 1987., and Bryk, Anthony S., Valerie E. Lee, et. al, Catholic Schools and the Common Good. Cambridge MA, Harvard University Press, 1993; Hill, Paul T., Gail E. Foster, and Tamar Gendler, High Schools with Character, Santa Monica CA, RAND, 1990; Crain, Robert L., The Effectiveness of New York City's Career Magnet Schools. Columbia Univ., New York, NY. Institute on Education and the Economy, 1992; Gamoran, Adam, "Do Magnet Schools Boost Achievement?" Educational Leadership, v54 n2 p42-46 1996); and Hill, Paul T., Lawrence Pierce, Paul Schneider, and Sara Taggart, Schools' Integrative Capital, Seattle, University of Washington Center on Re-Inventing Public Education, 1998.

⁹ Le Tendre, Mary Jean, "Title I Schoolwide Programs: Improving Schools for All Children". *Journal of Education for Students Placed at Risk* v1n2 p109-11 1996.

¹⁰ See, for example, Muncey, Donna, and Patrick McQuillan, Reform and Resistance in Schools and Classrooms: An Ethnographic View of the Coalition of Essential Schools. New Haven: Yale University Press, 1996. See also Bimber, Bruce A., The Decentralization Mirage: Comparing Decision-Making Arrangements In Four High Schools. Santa Monica, CA RAND, 1994.

¹¹ For an account of the effects of these programs see Jackie Kimbrough and Hill, Paul T., The Aggregate Effects of Federal Education Programs, Santa Monica CA, RAND, 1980.

state and federal funding agencies. Staff members and students are brought into the school or taken out of it in pursuit of district-wide priorities, such as fulfillment of union contracts and maintenance of racial balance. New curricula and staff training programs are selected for whole districts and then infused into schools. Budget shortfalls are met by mandated district-wide reductions in school staffing or services, and the use of budget increases is also determined at the district level, in negotiations between the school board and teachers' unions.

People in schools still strive to make them caring and adaptive places that meet students' needs. However, teachers and principals must now negotiate their ways around rules, structures, and working conditions imposed by government. Whether or not government's initiatives were necessary at the time, they have certainly burdened schools.

FEDERAL PROGRAMS SUBJECT SCHOOLS TO POLITICAL ENGINEERING

Federal programs have deliberately put schools under new political pressures. On the assumption that past neglect of disadvantaged students was caused by local politics, in which their parents had few allies and little influence, federal programs tried to change the balance of local political forces. All large federal programs were expressly organized around constituency groups, helped parent groups organize, and gave parents official roles in school decision-making. Some gave parents new access to judicial remedies, on the assumption that the ability to threaten litigation would increase their influence on schools. Most tried to colonize state and local education agencies with individuals paid to advocate for compliance with federal program rules. As a result teachers are sometimes forced to treat students differently, depending on their links to organized external groups that have been set up and empowered by government actions. Many school principals' jobs have been changed, from the managers of small productive organizations to brokers among well-established interest groups and coordinators of compliance processes

Schools were never without their politics. Even in private schools where government has little influence, different parents sometimes make competing demands, and the way these are resolved can affect teacher actions and student opportunities. Donors have influence. Staff members can disagree, and even form competing factions, about the relative importance of arts and sciences, or athletics versus academics. Individual staff members can also compete for approval, status, or good job opportunities.

However, in those situations, people's interests and their influence are defined within the school community. Federal programs, court orders, and regulations have deliberately sought to re-engineer the politics of individual schools, increasing the leverage exercised by certain groups within the school and creating leverage for outside groups that previously had no standing in school decision-making. The consequence is that individual schools operate in a far more complex political environment now than before ESEA was first enacted.

Federal Programs' Focus on Constituencies

Like other Great Society programs, Title I was founded on a political argument that state and local education politics favored the white middle class and excluded the poor and minorities. In order to help low-income and minority students, the federal government would have to over-ride, and ultimately alter, the innate bias of state and local politics. Title I therefore required that federal funds be tied to easily identified objects or services, and that those assets be used only for the benefit of individual children deemed eligible under federal rules. ¹² In the face of evidence that some localities, especially in the South, resisted using federal funds in these ways, the Office of Education created increasingly stringent program rules. These required localities not only to use federal funds as intended, but also to show that as much state and local money was spent on disadvantaged students as on other pupils. ¹³

This evolution of the federal role was strongly promoted by a coalition of U.S. Office of Education officials and newly burgeoning Washington based educational interest groups. As Halperin wrote approvingly in 1975: "ESEA has become a rallying point for those concerned about achieving full educational opportunity for specific segments of the population [leading to]...special programs for out of school youth...migrant workers...neglected youngsters and juvenile delinquents... handicapped children ... children forced to speak one language at home and another in the schools...preschool children...Now the social movements which spawned ESEA are merging with those demanding greater child development and day-care services...and have pushed through school lunch, breakfast, special milk, and related programs." 14

¹³ Washington Research Project, Title I of ESEA: Is It Helping Poor Children? New York, NAACP Legal Defense and Education Fund, 1969. See also Hughes, op cit. Ch. 2.

¹⁴ Halperin, op. cit., p. 149.

¹²Federal policy in this regard was influenced strongly by University of Chicago professor Benjamin Bloom's research showing that disadvantaged children could benefit by "compensatory" (e.g. additional) instruction. On the influence of Bloom's work see Hughes and Hughes, op. cit. p. 43.

Title I tried to create local bases of political and administrative support by building cadres of federally-paid compliance officers in state education departments and local school districts, and by creating low-income parent advisory councils that could veto school districts' plans for the use of federal funds. It also put pressure on state and local superintendents by requiring frequent public evaluations of program effectiveness. Pressure to demonstrate student learning gains led most states to focus their Title I money on children in early grades, where reading gains are easier to measure. Performance pressure also led the U.S. Department of Education to require "concentration" of Title I funds in local schools with the highest proportions of low-income children.

Politicization of Parent Involvement

Since the earliest days of Title I, federal officials have tried to stimulate creation of grassroots support groups for it and other programs like education of the handicapped and bilingual education. Influenced by War on Poverty empowerment strategies, federal regulation writers' preferred approach was to organize the parents of program recipients and give them veto power over local uses of program funds. This, it was believed, would insure that funds were spent on the right children. Federal administrators also encouraged formation of local interest groups of citizens and educators dedicated to the schooling of specified groups of children. The Title I program pioneered these approaches, but federal administrators of programs for handicapped children raised the creation of local support groups to a high art. Federal programs for the handicapped did more than organize parents; they also gave parents of handicapped children unique legal rights to oversee services proposed for their children and to bring lawsuits against school districts that did not offer what the parents thought their children needed.

Administrators of state programs followed suit. By the mid-1970s, the soft collaborative ideal of parental involvement in education had taken on a hard political edge. Localities where students were compelled to attend certain schools because of desegregation court orders tried to compensate by giving parents a chance to influence school programs. The idea of authoritative parent advisory councils influenced the "site based management" movement that started in Miami and was quickly adopted throughout the country. Teacher groups also demanded decision-making power. The idea of shared parent-teacher governance of schools reached its apogee in the 1988 Illinois State law on Chicago reform, which mandated elected local site councils to govern all Chicago schools.

¹⁵ See Hill, Paul T. and Ellen L. Marks, Federal Influence over State and Local Government: The Case of Nondiscrimination in Education. Santa Monica CA, RAND, 1982.

Some schools improved under this new politicization of parent and teacher involvement, but many did not. Many Title I parent advisory councils were inactive, and others were controlled by activist factions that less combative parents could not challenge. Other groups (e.g. parents of the gifted and talented) organized politically to protect their children's education in the face of the extraordinary legal leverage enjoyed by parents of the handicapped. As Bryk and others reported about the Chicago school reform, some schools changed dramatically for the better but the majority did not improve and many got dramatically worse as latent rivalries among parent and teacher factions came to the surface and dominated school life.¹⁶

Engineering New Leverage for Favored Groups

Until the mid- 1970s, federal programs had generally paid for all the activities -services, purchasing, and administrative record keeping -- that they required states and
localities to undertake. In the late 1970s, however, Congress and federal officials started
exploiting all the leverage available to the donor of funds that the recipient has come to
rely on. States and school districts that had become accustomed to receiving and using
Title I funds found that new strings were attached. If they were to continue receiving
Title I and other grant funds, they had to create new sports programs for women, make
their buildings accessible to handicapped children, follow federal standards for equal
employment opportunity, etc.

The most important unfunded mandate, the federal program for handicapped children (now called IDEA, The Individuals With Disabilities Education Act)¹⁷, created an *entitlement*, requiring that some students receive all the services they need regardless of the effects on other school or district activities or the needs of other students.

Unfunded entitlements strictly limit school leaders' ability to make judgments about services to children. The severity of the tradeoff between fulfilling entitlements and serving other students depends on the numbers of entitlees and the cost of their services. The numbers of disabled children range from less than 10% to nearly 20% of the students in some districts. Though services for children with the most common forms of handicapping conditions typically cost only 20 to 50% more than local average per-pupil

¹⁶ Bryk, Anthony S., Democratic *Localism: a Lever for Institutional Renewal*, Los Angeles, Westview Press, 1997.

¹⁷ Morrissey, Patricia, "The Individuals with Disabilities Education Act of 1997: Selected Observations", National Association of Secondary School Principals' Bulletin; v82 n594 p5-11 Jan 1998.

expenditures, services to more profoundly disabled or disturbed students can cost five to ten times the district average.

In the early days of the federal program for handicapped children, it was difficult to see the ways in which funding of special education services affected the regular school program. Extremely expensive were rare. In a school district serving 5,000 students, a \$50,000 placement for one student would require a transfer of at most \$10 (and probably far less than that) from the average amount available for the education of any other child. This deduction was difficult to observe, since cross-subsidies among groups of students were (and still are) created in the school district central bureaucracy, where parents cannot easily see them. However, as special education has grown and the numbers of students and handicapping conditions has increased, regular classrooms increasingly bear – and show - the cost of accommodations made. 18

Unfunded mandates are a form of political engineering. They use the federal government's leverage as a donor – based on the implied threat to remove a grant on which the recipient has come to depend -- to give designated groups new claims on locally-funded services.

By the late 1970s the federal government enacted the biggest unfunded mandate of all, the Education for All Handicapped Children Act of 1975. That statute established a new civil right that was limited to a particular class of citizens. It required all school districts to provide "appropriate" services to all handicapped children, as defined by an individualized educational plan approved by parents and experts in education of the disabled. School districts were required to reconcile two quite different principles: to educate handicapped children in the "least restrictive environment" while providing any form of service considered necessary for the child's education. Parents who were not satisfied with a district's plans could seek redress in the courts, and school districts were required to pay for any service or placement required (including, in some cases, placement in private residential facilities), whatever the cost.

The Education for All Handicapped Children Act did not derive from Title I but was based on court orders that had established new rules for the education of severely handicapped children in Pennsylvania and elsewhere.¹⁹ It established the principle that the federal government could make certain children the beneficiaries of an absolute

¹⁸As one superintendent said in an interview conducted for this paper, "If people knew how much special education drives a school system's budget, there would be a revolution."

¹⁹ See *Pennsylvania Association for Retarded Children v. Pennsylvania*, 343 Supp. 279, 307 (D.D. Pa. 1972).

service entitlement -- an entitlement that was established without reference to the needs of other students or the budget priorities and tax capacities of states and localities.²⁰

Early supporters of the Education for All Handicapped Children Act claimed that the number of children requiring expensive special services was low, and that the financial impact on regular education would be slight. Critics feared that the demands of parents with severely handicapped children would escalate; others predicted that the numbers of parents seeking special accommodations for their children would increase and an alliance between these parents and handicapped-education providers would lead to uncontrolled expansion of special education programs.

Special education grew rapidly in the late 1970s and 1980s. Real school spending increased by 61 percent from 1967 to 1991. However, only about one-fourth of the increase was directed at "regular education." The share of expenditures going to regular education dropped from 80 percent to 59 percent between 1967 and 1991, while the share going to special education climbed from 4 percent to 17 percent. Of the new net money spent on education, about 38 percent went to special education for severely handicapped and learning-disabled children. Increasing numbers of parents sought individually tailored accommodations for their children, and the definitions of "handicapping conditions" proliferated. Virtually any child who had trouble learning to read or adjusting to the behavioral demands of schools could be considered handicapped and was therefore entitled to a special accommodation. Litigation on schools' obligations under the law also forced schools to accept responsibility for medical services (e.g. catheterization) and limited schools' ability to deal aggressively with disruptive student behavior.

Not every parent who wanted individualized treatment for his or her child was willing to accept the "handicapped" or "special education label." Thus, many parents and advocacy groups organized to seek special treatment for other children under such labels as "gifted" or "bilingual." The high water mark for such efforts was a proposal made by a Title I reauthorization commission in 1993, to give every child in the United States a judicially enforceable "opportunity to learn" guarantee. To date, no group other than the

²⁰ See Neal, David, and David L. Kirp, The Allure of Legalization Reconsidered: The Case of Special Education, Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance, 1983, See also Hill, Paul T., and Doren Madey, Education Policymaking Through the Civil Justice System, Santa Monica, RAND, 1982.

²¹ See Rothstein, Richard and Karen Hawley Miles, Where's the Money Gone? Changes in the Level and Composition of Education Spending, Washington D.C. The Economic Policy Institute, 1995.
²²On rules for dealing with student behavior see Toby, Jackson, "Getting Serious about School Discipline", The Public Interest, 133, Fall 1998, p. 68-83.

handicapped has been able to gain an absolute entitlement to services.²³ Once organized for action, however, many of these groups were able to win political concessions from districts and schools.

By establishing that some students have more claims on political and legal protection than others, programs for the handicapped helped foster a virtually universal feeling among public school teachers and parents that they are not being treated fairly and that they must, therefore, look out for themselves. As Alfie Kohn has shown, many advantaged parents act on this feeling by using their influence and access to obtain the best placements for their own children.²⁴

For schools, as for communities, political engineering by outside parties can have disastrous consequences. Nobody knows what a group will do with new powers, or how groups will react to policies that afford advantages to their rivals. The local school or district is responsible for making realistic decisions about what can best benefit the most students and what accommodations for special needs are possible. However, if only one group has such an entitlement, district and school leaders face a different problem: they are obliged fully to satisfy the entitlements first and then fund the education of all other children out of what is left.

One thing is clear, however: politicizing school life draws attention toward the agendas of organized adult groups and away from the more mundane concerns of teaching and learning.

Colonization of Local and State Agencies

Local school systems, especially in large urban districts, depend heavily on federal funding to staff their central offices. Federal funds pay for major shares of most school districts testing and evaluation programs, teacher training programs, and purchases of equipment. Though they are generally not as dependent on federal funding as state departments of education, local districts are heavily influenced and constrained by federal programs and their resident managers. Federal program coordinators often resist local reform initiatives that increase individual schools control of funds, citing possible disruption of relations with the federal government, and possible job loss for

²³ The HEW Office of Civil rights did succeed for a while in creating an administratively-enforced entitlement to bilingual education, based on the principles established in *Lau v. Nichols*, 414 U.S. 563 (1974). *Lau* had force of law only in the defendant school district, San Francisco, but HEW applied the terms of the court order to school districts throughout the country. ²⁴Kohn, Alfie, "Only for My Kid: How Privileged Parents Undermine School Reform", *Phi Delta Kappan*, April 1998, pp. 569-577.

specialists employed to deliver federal program services.

This situation is the result of a deliberate effort by federal program managers to colonize state and local education agencies. By offering to pay for staff members who would administer federal programs and manage federally-mandated compliance processes, federal programs like Title I and IDEA created new sources of leverage on schools' use of funds and distribution of services.

Ted Sanders' experience in Ohio shows how thoroughly colonized the states have become. When he became Ohio's Superintendent of Public Instruction in 1991, Sanders intended to make the state education department a force for school improvement throughout the Buckeye State. He quickly discovered, however, that he had practically nothing to say about the responsibilities of the over 600 employees who nominally worked for him. The vast majority of them were funded by federal programs -- Title I, programs for the handicapped, vocational education, etc., and had demanding oversight and enforcement duties. Those people were often the best-educated and most experienced employees of the Ohio Department of Education; most of the remaining employees were administrators and financial specialists, not people who could contribute to a statewide' school improvement program.²⁵

As Table I shows, many state departments of education draw most of their funding from federal sources.²⁶ In many states, the only employees on the state payroll are those who work directly for the superintendent and those who collect funds from the legislature and write checks to localities. Though some states, notably Kentucky, have been able to steer their own courses independently of the federal government, many have no real agenda beyond keeping federal funds flowing.

Table I: Federal Share of State Education Agency Operating Funds in 1993

	All Federal Sources
All states	41%
Michigan	77
Iowa	71
Alabama	69

²⁵Governor's Task Force on Education, Model for the Future...an Organization Study of the Ohio Department of Education, Columbus, State of Ohio, 1991.

²⁶ Data in the text are drawn from U.S. Department of Education (1998) The Use of Federal Administrative Funds for Administrative Costs: Washington D.C.: U.S. Department of Education, Planning and Evaluation Service.

South Dakota	62
Maryland	61
New Hampshire	60
North Dakota	59
Utah	59

Starting in the early 1990s, several states tried to reassert control of their departments of education, hoping to turn them into forces for general school improvement. Kentucky, Virginia, Illinois, Texas, and Ohio, were among the first to try to rehabilitate these institutions. In the mid-1990s, states that were committed to standards-based reform also tried to make their education departments into instruments for general school improvement (e.g. Washington, Maryland, Oregon, Missouri). Though some are starting to make progress, the continuing presence of many paid "colonists" from federal programs remains an obstacle.

Today's chief state school officers are often experts in the administration of federal programs. Their delegate in Washington, the Council of Chief State School Officers, supports strong "categorical" regulations on the use of federal funds and opposes initiatives that would give individual schools greater discretion.

Local school districts are not as thoroughly colonized. The majority of central office staff members are still paid from state and local funds, and the superintendent is clearly more accountable to the local school board than to federal program managers in Washington and the state capitol.

However, colonization definitely limits the flexibility of local school districts. Many districts are unable to take full advantage of flexibility provisions recently written into Title I because their federal program coordinators insist on maintaining patterns of service that have withstood earlier compliance audits. Federal program coordinators also resist allowing schools to choose the teachers who will deliver federally-paid instructional services, and they control much of the money available for teacher inservice training. Though superintendents are often able to negotiate successfully for cooperation, they must treat their own federal coordinators as representatives of an outside power.

Such constraints on superintendents impede certain kinds of local school improvement initiatives. Superintendents often find that they cannot deliver on promises

to evaluate schools on the basis of productivity, not compliance. School leadership teams of teachers and administrators often find that promised "lump sum school budgeting" is not real, because teachers hired with federal program dollars are still controlled by central office coordinators. Philanthropists often find that schools cannot implement privately-funded reform initiatives because federal program operations cannot be changed to accommodate them.

Through these methods – creating new political leverage for selected parents, favoring certain groups in the competition for funds, helping potential interest groups to form and create agendas, and colonizing state and local education agencies — the federal government created new forces to influence schools. By the same methods, federal programs have helped turn public schools into inflexible government institutions, forced to respond as much to political forces as to the imperatives of teaching and learning.

FEDERAL PROGRAMS EQUATE EQUITY WITH POOR PROXIES FOR IT

Forty-five years after Brown v. Board of Education, the 14th Amendment remains the basis of the federal role in education: virtually all federal programs and rules identify inequalities and attempt to remedy them.

Equity is the historic basis for federal initiatives in K-12 education. Before the *Brown* decision, many states and localities practiced discrimination and neglected the needs of minority students. Actions in federal courts, the enactment of Title I, and enforcement efforts by the U.S. Office of Education (predecessor to the Department of Education) turned American school districts around.

Despite these successes, equity has often proven to be a problematic basis for action. Equity in education is difficult to identify. Because different children need different instructional experiences, identical treatment, or identical levels of expenditure, are not always equitable. Teachers are not commodities, and a few minutes with one may benefit a child more than several hours with another. Some children learn a great deal from books, while others are inspired by contact with computers, and others respond best to a great deal of interpersonal "face time."

Even an "identical outcomes" standard is not unequivocally equitable. Some children find it easy to attain high levels of skill in some areas (e.g. drawing, instrumental music, or dance) that others (for example, the present author) could never attain. Would it be equitable to require schools to teach all students to the same level of proficiency if that meant that the most gifted students would not fully develop their skills? Is it equitable or

inequitable to allow a student with low aptitudes in a given subject to neglect it in order to develop skills in an area where she has higher aptitude. Teachers and parents face such questions all the time, and try to resolve them in the best interest of individual children. No single equity principle can apply: What is best – equitable – in one case might not be equitable in another.

Formulas that define equity as universal attainment of certain minimum outcomes offer only a temporary escape from this conundrum. Ultimately, one must face questions similar to the ones raised above, e.g. is it equitable to accept a universal outcomes standard, no matter how high or low, if there is evidence that people who exceed the standard do better in jobs, further education, etc?

Inequalities such as those recognized by *Brown*, e.g. government policies expressly constructed to deny minority children access to publicly-funded schools, allow unambiguous remedial action. However, not every need and deficiency of schools can be approached effectively from this perspective. Some differences in student outcomes are caused by factors other than discrimination. Some educational failures affect every student in a school, district, or state, and cannot be addressed by interventions on behalf of a particular subset of students. Some educational problems require flexible and innovative solutions that must be crafted within the classroom or school.

Government does not fare well in the face of such complexity. Faced with the need to judge complex situations from a distance, government agencies and courts are forced to adopt relatively simple proxy measures for equity. To the degree that these practical definitions do not resolve puzzles such as those posed above, it is difficult for anyone to be sure that government has actually promoted equity.

Government programs and prescriptions can inhabit an unreal world in which contrary prescriptions can be smoothly integrated, adult tasks can be easily distinguished, and children can be easily classified. Teachers, students, and parents do not live in such a world.

Nothing about this analysis is news: government programs in all fields are forced to adopt measurable bases for action, and are liable to goal displacement if the proxies they use are bad. In education consistent use of bad proxies for equity can thwart efforts to make sure disadvantaged students get effective instruction.²⁷

²⁷State-level litigation about whether different groups were getting equitable shares of federal and state program funds also led to rigid court-imposed funding categories, so that districts and schools are forced to spend fixed sums for items like student transportation, even when they

Absent a sharp definition, equity has become defined in practice as a set of actions that are easily verifiable and that appear to create advantages for people who have received fewer resources, less attention, or attained poorer outcomes, than others. An activity can be considered equity-promoting whether or not it creates the greatest possible advantage per dollar spent, or benefits as many people as possible, or makes some people worse off in the course of making its direct beneficiaries better off. Federal programs are built this way. They can sometimes create equity, at least as measured by the government's chosen proxies, without creating all the intended benefits. For example:

Title I requires school districts to concentrate funds on certain schools, so that a low-income child in one school may get services while an equally low income child in another, higher-income, school does not.

Programs for education of the handicapped allow parents of individual children to press their demands in the courts, whether or not the benefits they gain are paid for by reducing expenditures on school programs that benefit poor, minority, or disadvantaged students.²⁸

Students classified as "behavior disordered" can be removed from classrooms only if their Individualized Education Plan" (IEP) is formally changed, regardless of whether they are learning in the class of or the consequences of their behavior for other students.²⁹

Government civil right agencies will act against a charter school that enrolls handicapped children and does not provide the services specified in those children's Individualized Education Plans. This can happen even if parents chose the school expressly because they thought their children were being harmed by the public school district's special education program.³⁰

would prefer to use additional funds for teachers, instructional materials, etc. See, for example, Washington State Special Education Coalition vs. State of Washington, et. al. (known as the Doran Decision III). Thurston County Superior Court (WA), 1988.

28 See Kimbrough and Hill, 1979, for evidence that some services for handicapped children are

²⁹ See Kimbrough and Hill, 1979, for evidence that some services for handicapped children are paid for by reducing what is provided to Title I-eligible students who are not also handicapped. ²⁹ For a discussion of the consequences of these requirements for handicapped children as well as for others see: Toby, Jackson, "Getting Serious About School Discipline", *The Public Interest*, 133, Fall 1998, p. 68-83.

These results will be reported in a forthcoming University of Washington book on the results of a national study of charter school accountability.

Another example of an equity definition that does not benefit the children it is intended to protect: Title I and other federal programs require equalization of local spending per child before federal funds can be added on. But the proxies for equal spending they use do not challenge the biggest real source of local spending inequalities, which is the distribution of high-salaried teachers. As a proxy for equity, federal programs count the numbers of teachers in schools, not their real-dollar cost, so that the schools in the lowest-income neighborhoods, which attract the lowest-paid and least-qualified teachers, actually get far less than their share of funds.³¹

By convention, if not in reality, all procedures described above promote equity. But they may not do as much for those children as other arrangements that strengthen the schools they attend, or create significant movement toward the undefined but intensely desired goal of educational equality.

Using such proxies for equity places great emphasis on the rituals of compliance, not on problem solving. It is better suited to the protection of existing programs and the stabilization of adult working environments, than to finding solutions to the problem of how to improve education for the disadvantaged and handicapped.

A dialogue overheard by the present author illustrates how commitment to poor proxies for equity can act like *ice-nine* in schools. Two academics, one who had devoted his career to studying school desegregation, and another who had specialized in school effectiveness research, were asked to define a good school. The first academic replied, "A good school is one in which every person knows her rights and suffers no discrimination." The second academic replied, "a good school is a caring environment where the adults use all their knowledge and energy to find ways to help every student learn to high standards."

These definitions of a good school might be compatible, but their differences in emphasis are clear. Under the second definition, a school is a unique problem-solving organization unified by a commitment to helping all children meet a common standard. If it lives up to its commitments, it will not classify any child in an arbitrary way or give up on any student without first exhausting all the time, energy, and expertise available. Under the first definition, a good school is built around a set of rules intended to prevent discrimination. There is reason to question whether a school so constructed can teach any child to the limits of her ability.

³¹Haycock, Kati, "Eliminate Gross Disparities under Your Control", School Administrator, p30-31 May 1997.

Associating equity with specific regulations and processes makes federal programs difficult to assail, but it does not make them effective. It also impedes serious discussion about how best to use all the resources available for the education of disadvantaged children. From the standpoint of people who equate fairness with the proxies for it developed under federal programs, critics who propose changes in Title I targeting or decision-making processes, or current methods for determining handicapped children's placements, are by definition risking equity.

Government naturally deals with large issues, mass programs, and gross-grained oversight. It cannot, and generally does not need to, exercise fine-grained judgment about the activities of unique, intimate local groups. In trying to translate national objectives into education programs, government has entered into situations where doing good is very difficult. The methods of administration and oversight that come naturally to a government of continental scale require use of simplifications and proxy measures that match up poorly with the needs of schools. The results are all but inevitable: government is forced to use measures of merit that are only loosely related to its goals and schools are forced to do things that make them less effective.

After a brief section that attempts a balanced assessment of what the federal government has accomplished to date, this paper ends with suggestions about how changes in federal policy can help public schools thaw out after their exposure to government's *ice-nine*.

ON BALANCE: THE EFFECTS OF FEDERAL PROGRAMS

There is little doubt that federal initiatives in K-12 education have succeeded in making disadvantaged children the top priority at the national, state, and local levels. However, though federal programs have caused changes that helped low income and minority children, federal programs have often done harm to those same children's education -- and everyone else's -- by weakening the schools. They do so by diverting funds and energy away from regular instruction and toward special programs – much as the child benefit theory anticipated and even ordained.

Public discourse about education has changed since the 1960s. No one seriously questions the importance and moral rightness of providing disadvantaged children with a fair opportunity to gain skills, stay in school, attend college, and achieve advanced training. School systems are now staffed almost entirely by people whose training is deeply influenced by values about education of the disadvantaged.

Changes in legal doctrines (e.g. the 1954 *Brown* decision and subsequent Supreme Court actions), and demographic changes that make business more dependent than ever on immigrants and native born minority workers, have also transformed national priorities.

However, the federal government has not been able to follow up its success in setting new priorities with effective action. Many of its programs and rules have, in fact, weakened schools by putting process before results, caused displacement of goals from serving students to guaranteeing administrative compliance, and weakened schools' ability to pursue effective instructional programs and solve the problems presented by their students.

No one intended these outcomes. In fact, the people who write and advocate for federal program regulations can often demonstrate that local educators do not recognize or use all the options they have and that the negative outcomes of federal programs result from choices that state and local educators make.³²

Federal programs have provided needed funds for many cash-strapped school systems but they have also set off chains of events that have weakened the very institutions on which all children, rich and poor, depend for their education. Federal programs did not directly cause the current unrest about public education. But they have contributed greatly to schools' loss of institutional coherence and educators' eroding sense of personal responsibility, which in turn led to pressure for new schools operated under new rules, the campaign for parental control via school choice, not political involvement, and the belief that public schools are not safe and caring enough.

The flight of middle and working class parents of all races from city schools,³³ and African American parents' growing demand for new options and the opportunity to send their children to private schools when nearby public schools are failing³⁴ have many sources. But it is hard to see how they would have happened to the current degree without the negative aspects of federal programs discussed above.

³² See, for example, Kimbrough, Jackie, *The Aggregate Effects of Federal Education Programs*, Santa Monica, Calif.: Santa Monica, RAND, 1981.

³³ Doyle, Denis P., Where the Connoisseurs Send Their Children to School. Indianapolis, IN., Hudson Institute, 1995.

³⁴ See, for example, Horowitz, Sari, Poll Finds Backing for D.C. School Vouchers; Blacks Support Idea More Than Whites. *The Washington Post*, May 23, 1998. See also Johnson, Jean and John Immerwahr, First Things First: What Americans Expect from the Public Schools, *American Educator*; v18 n4 p4-6,8,11-13,44-45, 1995

There are no villains here. One might blame the people who, in the 1960s and 1970s, were confident that the new federal initiatives would help the poor without harming anyone else (and would provide new advantages for poor children without simultaneously creating new obstacles to their education). The present author, whose work on the 1977 Title I reauthorization made a significant contribution to the regulatory structure of Title I, does not berate himself now for actions taken then, nor should anyone else. Yet, refraining from judging past actions does not justify persisting in the face of current knowledge about the harm done by many federal programs and policies. No one can claim that the current chaotic system of laws, regulations, constraints, and preferences is the best one that we Americans could design for our children.

How can the federal government maintain its commitment to improving education for the disadvantaged, while promoting, rather than interfering with, the improvement of schools? Though many localities would probably retain their current commitment to improving education for poor and minority children even if all federal programs were eliminated, some might not. Moreover, some localities, particularly the poorest rural areas and biggest cities, would have difficulty maintaining even the marginal quality of their instructional programs without continued federal aid.

The next section will suggest principles on which a more constructive federal role could be constructed.

TOWARD A MORE POSITIVE FEDERAL ROLE

The federal government can be both a force for general school improvement and a source of initiative on behalf of the poor and disadvantaged. Accomplishing those goals, while helping schools become less governmental and more communal, requires fundamental changes at three levels: Federal programs must be funded and operated differently; the Department of Education must be organized differently, to become a national resource, not a captive of constituency-based interests; and Congress must oversee the Department and its programs differently, focusing on its contributions to schools rather than its operation of separate categorical programs.

Can these things be done within the lifetimes of people reading this paper? Of course they can, if Congress decides to do it. Though the infrastructure built up to administer existing federal programs is large and powerful, it is not significantly larger or more powerful than the county-based welfare apparatus that Congress disassembled a few years ago. Similarly, though the constituencies that support the existing programs

are large, they are not strongly united: beneficiary groups, especially low-income and minority parents whose children benefit from Title I, are far more interested in better schools than in continuation of a particular federal program.

The foregoing statements come easily to a person who, like the present author, lives a continent away from Washington and spends much more time in the halls of schools than in Congress or the Department of Education. Schools and local education agencies would suffer if federal funds were withdrawn, and they would benefit if funding were, as it should be, increased. But most schools and districts could readily adapt to drastic revisions in federal program structure and administration. The barriers to change are not in the schools, states, or localities, but in Washington, in the form of providers' lobbies and other adult groups who gain from the ways the programs are now run. Necessary change will be politically difficult. But the needs of children and schools must not take a back seat to the self-protection interests of politicians.

A new federal role can and should be built on a simple set of principles:³⁵

Subsidize Children, Not Jurisdictions.

The federal government should support the education of disadvantaged children directly, by funding the schools that actually educate children, not government administrative structures. Congress should consolidate all federal grant programs into one funding mechanism, with procedures for identifying individual beneficiaries, providing funds directly to the schools those children attend, and ensuring that schools attended by beneficiaries get the same amounts of local and state dollars per pupil as other schools in the same district.³⁶

Federal laws and regulations should not require that money be traceable to particular programs, services, or students. No federal program should require localities to treat identical children differently, depending on what school they attend.

Federal funding should not remove responsibility for judgments and trade-offs about a child's education from the only people who can make them well, her teachers and

³⁵For a compatible, but different, set of principles see Finn, Chester E., and Michael J. Petrilli, "Washington Versus School Reform", *The Public Interest*, 133, Fall, 1998, p. 55-64.

Diane Ravitch has given this idea a name: a portable entitlement. See Student Performance: the National Agenda in Education, in Kanstoroom Marci, and Chester E. Finn Jr., eds., New Directions: Federal Education Policy in the Twenty-First Century, Washington, The Thomas B. Fordham Foundation, 1999, p. 139-146.

parents. Congress might establish especially high weighting factors for severely disabled children or children in extremely high-cost areas. But laws that create absolute entitlements to specific services, or permit court orders requiring optimal services for some children regardless of the consequences for other children's education, must be amended. This implies avoiding federal prescriptions about who must sign off on decisions, what sorts of planning processes states and localities must follow, and who, if aggrieved, has a private right of legal action.

Congress might allow localities to set age-level priorities (e.g provide twice as much federal money per beneficiary pupil in grades 6-8 as in grades 9-12). But it should not allow localities to create horizontal inequities among beneficiary children of a particular age, no matter where they go to school. Children's beneficiary status should depend on their demographic characteristics, not on their test scores or other school performance. Funding should not be reduced for disadvantaged students who perform at high levels.

This proposal will almost certainly strengthen demands for increased federal funding. The 30-40% of disadvantaged children who do not now receive Title I services would finally get them, and the need to spread federal funds among a larger number of students will generate demands to increase funding to match current per-child amounts.³⁷ Because the money and its uses would be visible at the school level, the case for increased funding should also be easy to make. A school could add another teacher for every 50 or 60 disadvantaged students, thus creating many new opportunities for instructional improvement.

Because some of the data required to identify individual children can be collected only at the local level, federal grants would have to follow the general procedures used by Title I: use census data (poverty counts) to allocate funds to the county level and use locally collected data (e.g. free lunch counts, surveys of family language backgrounds, school surveys to identify handicapped children) to identify beneficiaries. These assessments might best be done at the county level, rather than by individual school districts. Government agencies that distribute funds should be paid administrative fees for their services, but these should not lead to establishment of permanent federally funded monitoring staffs.

³⁷ Unpublished estimates of the added cost of a "portable entitlement" range from \$4 to \$20 billion annually. The size of the estimate appears to depend on the analyst's view of the desirability of such a change in federal program strategy.

rates. States could be required to analyze these data, comparing student growth rates in all schools in which federal funds are used versus all other schools. States could then be required to create new schooling options for students in low-growth rate schools. These options could be provided via state intervention, reconstitution, or creation of new schooling options (including by use of district-wide choice plans, vouchers, or charters).

The Department of Education could also periodically commission national sample-based studies of localities and schools, and provide information on problems to governors and mayors.

Attack Emergent Problems With Short-Term Special-Purpose Grants.

States and localities will continue to need help solving short-term problems like teacher shortages, facilities decay, lack of technology, or overcrowding. However, the federal government should avoid creating expectations that particular jurisdictions will receive permanent federal support. It should not fund any state or local government entity for more than three years without at least a one-year hiatus. Further, these short-term interventions should be limited to a fixed percentage (e.g. 10%) of all federal spending on K-12 education.

The Secretary of Education could then control a very substantial fund for investment and responses to emergent problems of states and localities. The Secretary, in consultation with a board representing Congress, presidential appointees, governors, and local educators and school providers, could devote as much as \$1.5 billion per year to specific problem-solving activities. Because this fund could not become an entitlement for any locality or function, and no one program could continue for more than three years, the use of this fund could be disciplined by becoming a significant issue in presidential campaigns.

Make The Education Department A National Resource, Not A Federal Ministry

The Department should be re-missioned to emphasize national issues over the use of federal regulatory power. Its current organization, which fosters close alliances between particular constituency groups and the bureaus that run programs, should be changed.³⁸ All the separate categorical program offices could be replaced by a unified division that writes checks and ensures that funds go to the schools and children for whom they are designated.

³⁸ Cite Chris Cross' paper.

The first step toward redefining the federal role would be to consolidate all federal grant programs into one statute and create clear definitions of beneficiaries. A reform of this scope would require scrutiny of some programs that do not normally come up for reauthorization at the same time as ESEA, for example, Vocational Education, IDEA, and the Department of Education's research structure. There is, however, no reason why those programs cannot be considered for reauthorization on the ESEA timetable. Including such programs in a review of ESEA is a necessary precondition for creating a rationalized and effective federal role in education.

Become School-Friendly.

Federal policy must work with, not against, the reality that the only people who can help a student are that child's teachers, parents, and neighbors. Washington should avoid buttressing any particular administrative regime or creating permanent groups of federally paid state or local employees. It should, similarly, avoid mandating any particular orthodoxy in educational organization, whether that is "systemic" reform that aligns standards, tests, curriculum, and teaching, charter schools, educational contracting, home schooling, cyber schooling, or anything else.

Other than eliminating earmarks that require states and localities to fund program-specific compliance monitors and coordinators, the federal government should neither solidify nor disassemble current state and local administrative structures. It should take a permissive but neutral stance toward such innovations in education provision as lump-sum budgeting of schools, private provision of school space and staffing, investment and school management by non-governmental entities, and voucher plans that expand educational options for the disadvantaged.

Define Results In Terms Of Student and School Performance.

The federal government should measure the effects of its programs in terms of overall improvement in the educational outcomes of children, both disadvantaged and advantaged, not on maintenance of a particular administrative or service scheme. Accountability based on detailed fiscal reporting and regulatory compliance do not lead to good instruction.

To assess results of its subsidies for students and schools, the federal government could conduct special analyses of the results of new statewide standards-based tests. These tests, now either in place or under construction in a majority of states, are designed to produce school-by-school comparisons in students' average test scores and growth

A second major Investments Division would sponsor research, development, statistics, and emergency investments. No matter how states and localities seek to improve their schools, they will depend on the availability, both in their regions and nationally, of well-trained teachers, sound techniques for student performance assessment, new technologies and ideas about instruction and school management, and evidence of the effectiveness of particular instructional methods. Through its Investments division, the Department of Education could invest in new ideas and fund rigorous clinical trials and demonstrations. Consistent with the principle that the Department should be a source of ideas and not a regulator, these results would be disseminated via the marketplace of ideas, not translated into laws, regulations, or incentives.

CONCLUSION

Would initiatives based on these principles thaw out all of the *ice-nine* created by today's federal programs and regulations and establish a perfect federal role? The answer

no: just as today's problems could not be anticipated in the 1960s, the challenges facing America's schools in the year 2010 cannot all be foreseen now. Future Congresses will need to reconsider and amend actions taken in 1999 and 2000.

Groups of providers and beneficiaries will always try to use federal power and dollars to create and solidify advantages for themselves. Professors and business leaders will be tempted to write their own ideas – about use of technology, adoption of whole-school designs, the best teaching methods, the correct average class size, or the perfect way to select and train teachers – into federal law.³⁹⁴⁰ Interest group representatives will draft laws and regulations that favor their constituencies; some will try to inflate court orders that apply only to specific cases into regulations that affect all schools.

The structure of the new federal role must be simple enough, and grounded on sufficiently clear principles, to withstand the inevitable processes of advocacy and advantage-taking. The foregoing suggestions lay a good foundation. But a more constructive federal role will need tending and defending: to coin a phrase, it is one thing to

create a new and more constructive federal role, and quite another to keep it.

³⁹ For lists of such proposals see Pogrow, Stanley, Title I: Wrong Help at the Wrong Time, and Palmaffy, Tyce, Title I: Despite the Best of Intentions, in Kanstoroom and Finn, *op. cit*.

PRESENTATION AT NERRP BOARD MEETING

"Building a Knowledge Base for Effective Teaching and Learning"

Synthesizing Existing Education Research and Improving the Quality of Prospective Research

Presentation to the National Education Research Planning and Priorities Board January 15, 1999

By Douglas Carnine, Director, National Center for Improving the Tools of Educators (NCITE) and professor at University of Oregon, Division of Educational Leadership, and Hans Meeder, Horizon Consulting Services, Columbia, Maryland

Introduction:

Today, as demanding new State education standards and accountability systems are being implemented, education leaders are recognizing the serious need for knowledge about the effectiveness of educational practices, based on sound research.

Unfortunately, with the exception of early childhood reading, most educators do not have access to a widely accepted, practical, reliable, and growing base of knowledge about effective educational practices.

Traditionally, the profession of education research has not adopted rigorous research methodology and rules of evidence by which to make judgments about the quality and applicability of various types of research. In most areas, there is a small and undefined core of knowledge about effective educational practice. This has allowed broad acceptance of untested approaches, which in turn, often fail, dragging down student achievement and diminishing support for public education.

The clear exception to the lack of a research base is in the key area of early reading instruction. In reading instruction, many educators are beginning to take advantage of the findings from decades of research funded through federal agencies, such as the National Institute for Child Health and Human Development. These research findings, as well as findings funded by the Department of Education, have been summarized in the report issued by the National Research Council, "Preventing Reading Difficulties in Young Children." (Snow, 1998). The subsequent National Reading Panel, created by Congress through the appropriations process, will provide even greater specificity about research findings on the type of instructional practices that are necessary to facilitate early reading success.

For education to become a "profession" in the fullest sense of the term, it must have a trustworthy, reliable base of knowledge from which individual practitioners can draw when making instructional decisions. Other professions have well-established procedures for

evaluating research on various approaches and for agreeing how those findings will be used to help guide professional practice.

Education, as a profession, must develop sustainable procedures and institutions that will provide reliable guidance for practitioners in dealing with challenging questions. Vehicles are needed to make practical, trustworthy information accessible about programs that work, the conditions under which the programs work, and with which students the programs have worked. This information would also be valuable to policymakers and the public and engender greater respect and trust in the education enterprise.

To achieve this vision for the education profession, federal policy and professional practices must be restructured. These changes include, but are not limited to, the following steps:

- Synthesizing existing education research using rigorous standards to judge the quality and applicability of the research;
- Developing a comprehensive research agenda that realistically prioritizes critical knowledge gaps affecting student achievement;
- Requiring that all federally funded research adhere to strict rules of research methodology and encouraging privately funded research to embrace these rules as well;
- Developing professional and/or governmental institutions that continually integrate emerging findings into the existing knowledge base;
- Establishing and strengthening paths of communication and training to help education policymakers and practitioners put into practice findings from the rigorous knowledge base.

To help fulfill this vision for the "professionalization" of education, we suggest the federal government, and specifically the Office of Educational Research and Improvement, take the following steps to enhance the usefulness and quality of federal education research:

- I. Continue an aggressive process to synthesize existing education research about major topics of interest to the public, policymakers, and school reformers. These syntheses must use high standards for methodology in evaluating research.
- II. Develop a comprehensive research agenda that realistically prioritizes critical knowledge gaps affecting student achievement;
- III. Across all research and evaluation programs, implement strict rules of research methodology to improve the quality, reliability and scale of education research funded by OERI and the Department of Education.
- IV. Create a Director of Research who has responsibility for implementing a comprehensive research agenda across all divisions that will address the knowledge gaps identified through the Research Synthesis process;
- V. Require that the work of the OERI Institutes, Centers, Field-Initiated Research and Labs be responsive to established research priorities;
- VI. Create research funding in large service programs, like title I, that will develop and field-test effective approaches for educating disadvantaged students, and place a

stronger emphasis on use of research-based instructional and management practices within all programs authorized through the Improving America's Schools Act (IASA).

VII. Develop stronger mechanisms within the IASA Eisenhower Professional Development grants for getting information about research-based instructional and management practices into the hands of educators in ways that are useful and practical.

I. Research Synthesis:

"Continue an aggressive process to synthesize existing education research about major topics of interest to school reformers. These syntheses must use high standards for methodology in evaluating research."

Completion of a comprehensive research synthesis and priority identification process is the key first step that must be accomplished to allow education to become a profession that possesses a widely accepted, practical, reliable, and growing base of knowledge about effective practices.

In recent months, a great deal of important activity relating to research synthesis has been placed in motion.

- First, in 1988, the National Research Council Commission on "Preventing Reading Difficulties" provided a helpful overview of the components necessary for reading readiness and effective practices for classroom instruction in grades 1-3.
- The National Reading Panel's report, due in 1999-2000, will provide more specific analysis about how classroom instructional practices for reading should be structured.
- In 1998, the NEA, AFT, AASA, NAESP, and NASSP issued a contract to American Institutes for Research (AIR) to synthesize the research on comprehensive school wide programs widely used in high-poverty schools. The synthesis used robust rules of evidence and brings together the major education organizations in defining and supporting rigorous research syntheses. This process identifies, through a simple labeling system, the research base for efficacy, usability and replicability underlying the various educational approaches.
- In 1998 the National Research Council released a report, "Educating Language Minority Children" (1998) that syntheses the current research and makes recommendations for future research.
- The National Academy of Sciences is currently creating two new panels to evaluate math education and early childhood language development and reading readiness.

We recommend the following policies relating to research synthesis:

- The two new panels on math education and early reading development should be encouraged to use rules of evidence similar to the rules being developed by the National Reading Panel. Research conducted with larger samples and rigorous methodology should be given greater weight in the panels' evaluations.
- Additional panels should be formed to evaluate existing research and make recommendations about the direction of future research for:
 - □ science education, and
 - school discipline and classroom management.

If the current NAS panels and future panels adopt rules of evidence, then the findings will provide more than a narrative summary. The findings will include an analyzed set of research studies (a registry) that can be made available broadly and can serve as the foundation for subsequent syntheses done on a regular basis. A registry and periodic updates of research are being instituted in medical and prevention research.

On a side note, the findings from the synthesis report would provide the basis for an outside organization to evaluate commercial education curriculum against the research findings. This independent evaluation of commercial materials would be of great usefulness to local education decisionmakers.

The synthesis process needs to be completed as quickly as possible, since the continuing research agenda must be built from a clearly established knowledge base. It is important that OERI and the National Education Research Planning and Priorities Board (the Priorities Board) not implement a new set of research priorities until this synthesis process is complete.

II. Research Priority Setting:

"Develop a comprehensive research agenda that realistically prioritizes critical knowledge gaps affecting student achievement."

In its first priority-setting process, the Priorities Board identified dozens of possibilities for education research, but unfortunately did not actually establish focused research priorities. Compounding the problem is the fact that the OERI infrastructure actually allows the Institutes, centers and labs to set their own research priorities regardless of whatever research priorities are established by OERI.

To correct these deficiencies, the following steps should be taken:

 The Priorities Board must work closely with the Research Synthesis panels and reports from the NAS and AIR on school-wide programs to determine what gaps exist in reliable research.

- The Priorities Board should develop systems to clearly communicate, not only the extent of the knowledge base, but also the research gaps, to researchers and foundations that fund education research.
- When the knowledge base and the gaps of knowledge have been identified, the Priorities Board must establish research priorities that address the most pressing educational needs faced by schools, teachers and local communities. While the Board is rightly empowered to set these priorities, procedures should ensure that the Board to receive input from a broad cross section of consumers of education -- teachers, parents, students, civic and business leaders. The priority-setting process must address the most pressing educational challenges facing local schools and school districts, such as effective teaching and learning in reading, math, science, English language instruction and school discipline and parent engagement.

III. Reform of OERI and Department of Education Research

"Across all research and evaluation programs, implement strict rules of research methodology to improve the quality, reliability and scale of education research funded by OERI and the Department of Education."

- Adopt definitions in legislation that would delineate among research at Levels I
 (Theory Building), Level II (Theory Testing) and Level III (large-scale
 Implementation).
- Invest at high percentage of new research funding, at least 80 percent for projects at Levels II and III, and ensure that all research projects utilize sound research methodology.
- Ensure that, whenever it is relevant, academic achievement is the primary outcome considered in determining the relative effectiveness of an educational intervention under study.

The central issue facing lawmakers and federal administrators for improving federal education research is the need to build a base of reliable knowledge about effective educational practices. Every study conducted with federal funding falls under the general label of "research." But to build a usable knowledge base, policymakers must delineate among stages and quality of research that exists to determine that which is most worthy of becoming part of our own shared knowledge base. Ellis and Fouts (1993, 1994) have suggested a three-level classification system to help in evaluation the evidence behind the statement: "The research says..."

According to the Ellis and Fouts model, Level 1 research is "theory building," comprised of correlation, descriptive data and qualitative case studies. Level II, "Theory Testing," allows a theory of instructional practice to be tested in the classroom to see its effect

compared to the alternatives. Level III evaluates the effects of the recommended teaching intervention using large-scale and schools and district-wide implementations. Research at this level is important because it examines the new intervention in full context.

Sroufe (1997), citing a 1997 GOA report, argues that there are not enough studies done which are of high enough quality to influence national education policy. A major issue is the guidelines used to assess the quality of knowledge, the confidence with which one can act upon research findings, or the minimum standards on which any action will seem warranted. The social sciences community takes refuge in the peer review process as a guarantor of research quality, but the standards of evidence between the social sciences differ greatly.

Below are the kinds of questions that should be asked to determine the quality of an experimental (Level II and Level III) research study. Comparable questions could be specified for qualitative research (Level I).

- 1. Were students and teachers randomly assigned to the experimental and control group with the groups ending up with comparable students?
- 2. Was there evidence that the subject sample and findings were representative and unbiased?
- 3. Was there a minimum of 12 participants in each condition?
- 4. Were the measures used valid, reliable, and not slanted to favor the experimental group?
- 5. Were competing/confounding variables controlled?
- 6. Were statistical conclusions valid?
- 7. Were the findings educationally significant?

These definitions and questions about research quality must be addressed. Ultimately, how this single issue is handled will determine whether federal education research conducted by OERI will become useful to educators or remain largely irrelevant.

IV. Research Directorate

"Create a Director of Research who has responsibility for implementing a comprehensive research agenda across all divisions that will address the knowledge gaps identified through the Research Synthesis process."

- We recommend creating a Director of Research for the Department of Education who will be able to implement the research priorities established by the Priorities Board and the Department, not only within OERI but across the entire Department of Education.
- Under current law, there is no operational plan for ensuring that research conducted within OERI or other Department of Education programs actually address the research priorities established by the Priorities Board and OERI. For example, the education research institutes report directly to the Assistant Secretary for OERI, but each institute creates its own research agenda and the Assistant Secretary does not require coordination of research among the institutes. Additionally, for the most part, field initiated research projects are

not required to demonstrate how their research plans address research priorities. Finally, the Research Priorities adopted have no direct bearing on program evaluations and work conducted by the Planning and Evaluation Service under the Office of the Undersecretary.

By creating a Director of Research with administrative authority within the Department of Education, perhaps within the office of the Undersecretary, research and program evaluations could be better coordinated with the research functions funded within OERI. The Director of Research would create an integrated, Department-wide scope of research that would integrate programmatic research with the role of the Institutes, the centers, and directed research dollars in addressing the research priorities identified by the Priorities Board. This plan needs to be clear and practical, and clarify how Congressionally-mandated research projects (such as those in title I and other programs) do or do not contribute to addressing the research priorities.

V. Responsiveness of OERI to Research Priorities

"Require that the work of the OERI Institutes, Centers, Field-Initiated Research and Labs be responsive to established research priorities."

- As the Priorities Board and OERI develop a joint Research Priorities plan, each of the Institutes should develop research priorities that are targeted at addressing issues in the Research Priorities Plan. Within the Institutes, Requests for Proposals for new center competitions should demonstrate how the center plans to address the research priorities.
- The requirement that every institute receive a predetermined minimum amount of funding should be eliminated. Based on the operational research plan, the Director of Research needs to have authority over which of the six institutes should be funded and at what level. Alternatively, Congress could make determinations on Institute funding in response to recommendations presented by the Department of Education.
- In the 1980s, when funding for OERI dropped dramatically, funding for labs and centers was essentially protected, and field-initiated research by independent researchers was zeroed out. Given the past acrimonious battles over funding for labs, centers and field-initiated research, we do not recommend altering their funding percentage set-asides. We believe it is more productive to insist upon better integration of research plans to address knowledge gaps identified through the knowledge synthesis process.
- We recommend that the Research Director convene conferences among researchers to
 collaboratively discuss ideas for prospective research and share findings from currently
 funded research. Subsequently, all or a large percentage of the Field-Initiated funded
 should be linked to the highest priority research questions. Under such an approach,
 independent researchers would be able to pursue narrowly focused basic research
 questions, but would do so within a context whereby their research was addressing specific

knowledge gaps and helping to build a larger base of knowledge.

• To implement the Priority Board's research agenda, the Director of Research must work to develop a more cooperative, inter-dependent relationship between OERI and the labs and centers. By developing a process similar to that used successfully by NIH, the Director of Research, working from the Research Priorities, makes the scope of the work of the Institutes more directly reflective of the research priorities identified by the Board.

VI. Research and Development Funding Through IASA Programs

"Create research funding in large service programs, like title I, that will develop and field-test effective approaches for educating disadvantaged students, and place a stronger emphasis on use of research-based instructional and management practices within all programs authorized through the Improving America's Schools Act (IASA)."

- In addition to integrating research, development and program evaluation, Congress should place a greater emphasis on research and development of educational strategies and programs within the major service programs. Most research funding within programs only goes for long-term evaluations of effectiveness, not developing effective educational strategies to improve the programs.
- If just one percent of title I were set aside for research and development of effective strategies for teaching and learning for disadvantaged students, \$70 million new research dollars would be available each year. That would almost double the current \$43 million available for research available to the Institutes, Centers and Field-Researchers.
- Additionally, in a manner similar to the criteria contained in the "Reading Excellence Act,"
 all IASA programs (title I, Even Start, Bilingual Education, etc.) could contain provisions
 encouraging state and local education agencies to pay more attention to choosing
 instructional strategies that have a reliable research-basis indicating improved student
 achievement.

VII. Enhanced Professional Development in Research-based Practice

"Develop stronger mechanisms within the IASA Eisenhower Professional Development grants for getting information of research-based instructional and management practices into the hands of educators in ways that are useful and practical."

Note: We have not yet developed specific policy options for this priority, but we believe the Priorities Board should give it attention during the upcoming IASA authorization process.

Summary:

For education to emerge as a profession that is knowledge-based, federal and state policies relating to education must be reformed, and new institutions and processes must be established to continually synthesize knowledge and make it available to practitioners and policymakers.

At the federal level, these critical steps must be taken:

- Research on critical issues must be synthesized using high standards of evidence:
- A realistic research agenda must be established to address knowledge gaps;
- All research and evaluation projects must utilize rigorous research methodology;
- Department of Education research and evaluation should be coordinated through a Research Directorate;
- OERI-funded institutions and research projects must be responsive to the research priorities established by the Priorities Board;
- Research and development funding for large scale studies should be set-aside from large service programs and all K-12 education programs must emphasize research-based practice; and
- Effective strategies for getting practical and useful research information to educators should be developed.

These reforms, accompanied by developments within professional education organizations and teacher training mechanisms, will form the foundation for education to emerge as a research-based profession. As such, educators can expect to see higher educational achievement among the students they serve.

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SUMMARY CHART OF RECOMMENDATIONS FOR OERI REAUTHORIZATION

RECOMMENDATIONS FOR OERI REAUTHORIZATION

As proposed by organizations and individuals, Summer, 1999

References for the columns are as follows:

- (1) Administration—Department of Education specifications for OERI legislative proposals (forthcoming)
- (2) NERPPB-Board policy statement, Investing in Learning, of April 5, 1999
- (3) Ravitch-Statement of Diane Ravitch, New York University and Brookings, before the Jefford's Senate Committee, April 14, 1999
- (4) Vinovskis—Statement of Maris Vinovskis, University of Michigan, before a joint House and Senate hearing on "Overview of Federal Education Research and Evaluation Efforts," June 17, 1999
- (5) Hill—Paul T. Hill, University of Washington, paper prepared for a chapter in a planned Brookings book on "Schools, Government, and the Federal Role in Education," May, 1999
- (6) Cross—Christopher T. Cross, Council for Basic Education, before a joint House and Senate hearing on "Overview of Federal Education Research and Evaluation Efforts," June 17, 1999
- (7) Carnine—Douglas Carnine, National Center for Improving the Tools of Educators, University of Oregon, presentation to NERPPB, January 15, 1999
- (8) AERA—Recommendations of AERA committee on OERI reauthorization (forthcoming)

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ORGANIZING FOR RESEARCH IN EDUCATION				l						
Move ED research to OERI; take technical assistance and grant programs out				X		<u> </u>			<u> </u>	
Align resources and mission (allow the Secretary to organize)		x (21)		<u> </u>		<u> </u>				
Make research an independent agency, outside ED			<u> </u>			x				
Make research, evaluation, assessment and statistics an independent agency, outside ED	•		x					· .		
Create a new data analysis unit, separate from both research and NCES						x			<u> </u>	
Leave action programs and regional labs in ED			х							
Eliminate the institutes	<u></u>			ļ		x		ļ	<u> </u>	
Create an ED "Investments" division to fund new ideas and rigorous clinical trials and demonstrations; disseminate "via the marketplace of ideas, not laws, regulations or incentives."					X					
Create a National Institute for Education Research (in lieu of OERI) that reports to the Secretary with authority to conduct research programs authorized in the act, and only such other Department programs assigned by the Secretary as the Board agrees are consistent with the Institute's mission. NCES not part of this proposal.	х				-			-		
There are four different ideas incorporated into these recommendations: (1) make the responsibilities of OERI more narrowly "research," by moving program grants out and other ED research activities in; (2) broaden the focus by combining research with statistics and possibly evaluation and statistical analysis; (3) place education research outside of ED as a separate function of Government with a goal of independence from political influence; and (4) eliminate the										

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institutes due to shortage of funds.										
LEADERSHIP									 	
Set a fixed term for the agency head; if it remains in ED, then change terminology to "director" or "commissioner."						x				
Appoint individuals with distinguished background in R, D or evaluation to assistant secretary post				х						
Make head of agency a presidential appointee			x							
Reduce turnover of assistant secretaries				х						
Appoint a research advisor to provide intellectual leadership and guidance				х						
Create a focal point for research leadership that can span across administrations		x (22)								
Create a director of research for the Department of Education to implement a comprehensive research agenda across all parts of the Department and address the knowledge gaps identified through the research synthesis process							х			
Require that the work of the institutes, centers, field-initiated studies and labs be responsive to established research priorities							х			
Keep the NCES commissioner term, but permit the individual "to serve until replaced." ??						x				
Make Director a Presidential appointee with a six year term	x									
Create a senior scientist position	х									
These recommendations include several approaches to building continuity and professionalism into the head of education research, through fixed terms, requirements for training and experience, or separation of the position of head of research from an Assistant Secretary who serves at the pleasure of the President. Other ideas captured in these recommendations are explicit extension of the director of research function across all of ED, required implementation of the research priorities through a research director, and, in NCES, permitting a more extended term of office (although the language is ambiguous).										
THE BOARD										
Make Board composition more like NAGB with bipartisan representation—governors, legislators, employers, public—rather than research experts			х	х						
Board should be composed of practitioners, policy makers and researchers						х				
Give Board authority to set specific research priorities and align funding and staffing to fit, more like NSF						х				
Establish a Board with 15 members (as at present), 3 year terms (6 at present); representing the general public, including the business community; education professions, including practitioners and researchers; and the various fields of education, including	x									·

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preschool, elementary and secondary, postsecondary, and adult; and appointed by the President with Senate confirmation. Board authorities are in part similar to present ones: setting policies, reviewing conduct, approving standards, advising the director. The Board would prepare an annual report (presently prepared by the Assistant Secretary) and would prescribe duties and powers for the director. It would not have authority to review awards, as it does at present, and there is nothing specific about external collaboration and consensus building.										
These proposals represent clearly differing views about the appropriate composition for the Board, one as the Board is currently constituted, and one similar to the very different composition of the National Assessment Governing Board. For reference, the 25 voting members on the National Assessment Governing Board include: 2 governors, different parties; two state legislators, different parties; two chief state school officers; one classroom teacher each from grades 4, 8, and 12; two curriculum specialists; one elementary and one secondary principal; one superintendent; one state board member, one local board member, one representative of business or industry, one nonpublic school administrator or policymaker; three testing and measurement experts; four additional members who represent the general public, including parents. The various recommendations would strengthen Board responsibilities to be more like NSF, and altering, somewhat, the balance between Board and Assistant Secretary duties. At least one recommendations calls for Presidential appointments.										
RESEARCH QUALITY										
Continue focus on standards for conduct and evaluation of research as a statutory priority	х	x (10)		х						
Create standing panels		(8,9)			:					
Provide more adequate funding for peer review processes		x (12)								
Adopt definitions in legislation that would delineate among research at levels I (theory building), level II (theory testing), and level III (large-scale implementation); invest at least 80% in levels II and III, and ensure that all research projects utilize sound research methodology							x			
Establish expert panels for advice on planning, management and evaluation of major programs of R & D; responsible to the director and report periodically to the Board	x									
FUNDING	 	 	 	 	-	 			-	
Increase funding for education research to level of \$1.5 billion annually over a five year period		x (20)								
Increase funding to 2% of Federal education spending, that is, to a level of \$700 million,						х			<u> </u>	

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	within a few years				· · · · · · · · · · · · · · · · · · ·						
	Remove allocation requirements for institutes and types of support		x (23)								
	Remove minimum allocation amounts for institutes		11 (0.5)					х			
	Create research funding in large service programs like Title I to develop and field-test effective approaches for educating disadvantaged students and place stronger emphasis on use of research-based instructional and management practices in all programs							x			
	COLLABORATION								 	· · · · · ·	
	More OERI collaboration with other agencies (note: this is already in current law and also in current Assistant Secretary plans)		x(14)		х						
	More OERI collaboration across research within the Department	ļ	x (15)						<u> </u>		
	More collaboration across labs, R & D centers and OERI		x (16)					х			
	The research director should convene conferences for collaboration on prospective research and share findings from current research							x			
	Use an electronic data base across Federal agencies for all education research projects to further coordination						х				
										ļ	
	RESEARCH PLANNING										<u> </u>
	Make academic achievement the primary outcome considered in determining the relative effectiveness of an intervention under study	,						x			
1 (The priority for research in education must be high achievement for all students and, within that domain, the initial emphasis should be on reading and mathematics achievement	:	x (1)								
04	Define "national significance" to include opportunities for conduct of important research, not only the significance or importance of problems identified by educators		x (13)								
•	Apply NIH consensus panel process as a model for determining the basic research agenda and for "endorsing the efficacy of 'treatments' in education."						х				
	Develop a comprehensive research agenda that realistically prioritizes critical knowledge gaps affecting student achievement							х			
	Establish priorities for teaching and learning of reading, writing, math and other academic subjects for all students; improving ability of schools, districts and states to implement reforms successfully; and using new knowledge from research such as development of the brain, technology and motivation. Director would develop limited specific priorities within these areas, and the Board would approve.	х									·
	OERI STAFF FUNCTIONS AND RECRUITMENT										
	Increase staff size				X				l		

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Recruit distinguished researchers and development professionals				х		İ				
Use excepted service appointments for temporary specialists				х		x				
Provide opportunities for substantive and methodological training for staff to keep abreast of recent developments		x (18)		x						
Conduct some research within the agency (Note: also see "synthesis," below)						х				
Determine responsibilities for staff both to advance OERI work and to attract and retain staff		x (18)								
Authorize two year appointments for technical and professional employees	х									
Authorize research fellowships	х									
PROBLEM-SOLVING R & D									ļ	
Create a separate program for large-scale, systematic development; oversight by a distinguished board of experts				x						
Support projects for joint researcher/educator accountability to achieve success for research based problem-solving		x (19)								
Among authorizations for the Institute are: design and use new methods and strategies to conduct research and development that improve education; also, conduct and support methodologies including demonstrations and experiments that are appropriate to the research questions to test promising practices in a variety of educational settings, design and development activities, evaluations, and syntheses.	x									
	ļ									<u> </u>
ROLE OF LABS AND RELATION TO TECHNICAL ASSISTANCE	ļ				ļ		<u> </u>		ļ	
Merge regional labs and ED "Comprehensive Regional Assistance Centers;" distribute savings directly to states and local districts for purchase of technical assistance they need				x						
Consider grants to states and local districts to purchase technical assistance as a voucher approach, replacing ED technical assistance centers						x				
Consider removing labs from the education research agency						х				
[Note: this is above, under organizing for research] Leave labs in ED, outside of the research agency			x							
Among other things, labs shall participate in a technical assistance network with ED and other federally supported technical assistance providers	X									
			l		 	† · · · ·		<u> </u>		
RESEARCH CENTERS			 					 	 	
Make R & D centers more focused, with minimum size of \$ 4 to \$5 million annually, and a coherent, five year research program				x						
Support a limited number of national R & D centers for sustained, long-term research to advance theory and practice	х									

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FIELD INITIATED STUDIES				 	 	 				
Create focused field-initiated competitions targeted on particular problems—to supplement			<u> </u>	x				 		
more open-ended, researcher-defined competitions	1									
Distinguish between field initiated and directed competitions		x (11)								
For research proposal competitions, define "research" to exclude development, planning and demonstrations		x (13)								
BASIC RESEARCH			 	<u> </u>						
Establish a clear and explicit basic research program, initially 20% of the OERI work but rising to 50% when appropriations reach \$600 million.						х				
				<u> </u>	ļ	<u> </u>		ļ	ļ	<u> </u>
SYNTHESIS		(15)		<u> </u>		 			 	
Support synthesis activities (note: this is in current law)	X	x (17)		<u> </u>		 	 	 	 	
Continue an aggressive process to synthesize education research about major topics of interest to school reformers; use high standards for methodology							×		ļ	
	 	ļ <u> </u>	 	<u> </u>				 	ļ	ļ.——
DISSEMINATION	 		<u> </u>	 		<u> </u>	 	<u> </u>	 	ļ
Create programs to educate educators in the field of research; education schools should be required to instruct teacher candidates in use of research						X				
Use Eisenhower grants to get information on research-based instructional and management practices into the hands of educators							x			
Use technology to disseminate education research information						х				
Create a learned, peer reviewed, journal						X				
EVALUATION	<u> </u>			<u> </u>						
ED should develop a "serious" evaluation program				X						
Evaluation professional staff should be knowledgeable about rigorous program evaluation quantitative and qualitative approaches				x		,	_			
Evaluation should be overseen by an independent, objective group of experts to assure scientific soundness as well as usefulness to educators and policy makers				X						
Evaluations should be based on rigorous and statistically reliable studies, including	 		 	x		 	 		 	
randomized-assignment control groups, planned variations, as well as routine information	1]	l .]	1]]		1
from funded projects collected to make ongoing improvements at the local level					<u></u>				<u> </u>	
Do not co-locate evaluation with research, but do mandate coordination between						x				
evaluation and research	ļ			<u> </u>	<u> </u>	 		<u> </u>	<u> </u>	<u> </u>
Include evaluation with research, including evaluation of ED, NSF and other federal	<u></u>		x	1	<u></u>		<u> </u>	L	<u> </u>	<u> </u>

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education programs										
Some of these proposals are addressed to the standards of conduct for evaluation										
of Department programs and prescribe ways evaluations should be performed.					Į		}			j j
There is clearly a bifurcation of opinion about whether evaluation of ED							1		1	
programs should be a part of the function of the research agency, and also about				ĺ			ĺ		{	1
whether the scope of work is limited to ED or extends beyond it.				<u> </u>	l	<u> </u>	.	1 _	<u> </u>	

EJE; July 4, 1999



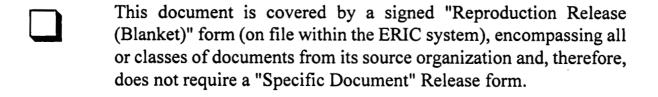
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